ORDER NO. AD9703053C8

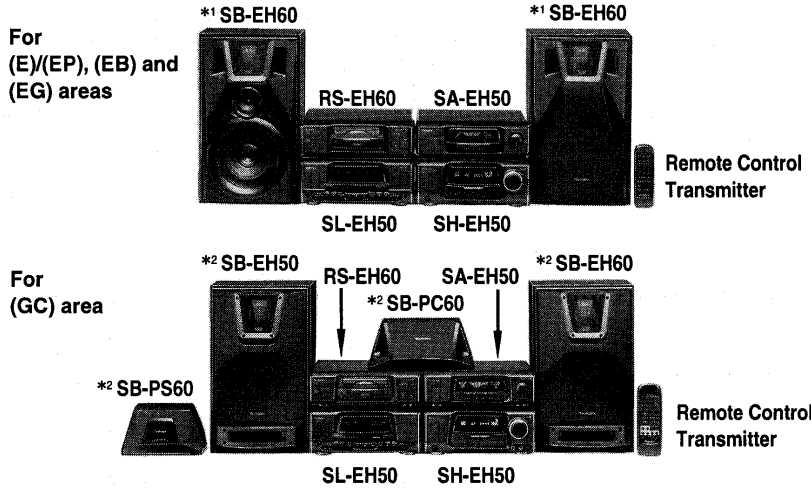
Service Manual

Tuner/Amplifier

System: SC-EH50

Tuner/Amplifier

SA-EH50



Colour

(K) ..... Black

Area

(E)/(EP) ... Europe, Russia.
(EB) ..... Great Britain.
(EG)..... Germany and Itary.
(GC) ..... Asia, Latin America, Middle East and Africa.

Because of unique interconnecting cables, when a component requires service, send or bring in the entire system.

Specifications

Amplifier Section

Power output :
DIN 1 kHz, THD 1%, both channels driven

For (E),(EB),(EG) and (EP) areas ;	2 × 50 W(6 ohm)
For (GC) area ;	2 × 35 W(6 ohm)

RMS 1 kHz, THD 10%, both channels driven

For (E),(EB),(EG) and (EP) areas ;	2 × 70 W(6 ohm)
For (GC) area ;	2 × 50 W(6 ohm)

(GC) area only

PRO LOGIC mode :
DIN 1 kHz, THD 1%

MAIN (both channels driven) ;	2 × 30W(6 ohm)
CENTER ;	30 W(8 ohm)
SURROUND ;	30W(4 ohm + 4 ohm)

RMS 1 kHz, THD 10%

MAIN (both channels driven) ;	2 × 40 W(6 ohm)
CENTER ;	40 W(8 ohm)
SURROUND ;	40 W(4 ohm + 4 ohm)
PMPO 1 kHz ;	1400 W
	(MAIN 6 ohm, CENT. 8 ohm, SURR. 4 ohm + 4 ohm)

Total harmonic distortion :	
Rated power at 1 kHz ;	1 %(6 ohm)
Half power at 1 kHz ;	0.09 %(6 ohm)
Load impedance :	
MAIN ;	6 ohm – 8 ohm
CENTER ;	8 ohm
SURROUND ;	4 ohm – 8 ohm)
S/N (rated power) :	
MAIN ;	80 dB
Frequency response ;	50 Hz–30 kHz (–3 dB)
Input sensitivity/impedance :	
EXTERNAL, AUX ;	250 mV/15 kohm
Output level :	
EXTERNAL RECOUT ;	250 mV/1.5 kohm
V.BASS mode :	
Center frequency ;	60 Hz
LEVEL (VOL –30 dB) ;	+8 dB

FM tuner section

Frequency range :	87.50–108.00 MHz (0.05 MHz steps)
Sensitivity :	1.8 µV (IHF usable)
S/N 26 dB ;	1.5 µV
S/N :	
MONO ;	70 dB (75 dB, IHF)
Stereo separation at 1 KHz ;	35 dB
Antenna terminal(s) ;	75 ohm (unbalanced)

AM tuner section

Frequency range :	522–1611 kHz (9 kHz steps) 530–1620 kHz (10 kHz steps)
Sensitivity (S/N 20 dB) :	500 µV/m

Timer section

Clock :	Quartz-lock type
Function :	Play timer (1 time dayly), REC timer (1 time dayly), Sleep (120 min., 30 min. intervals)
Setting :	1 minute–23 hours 59 minutes (1 min intervals)

General

Power consumption :	120 W
Power supply :	
For (E),(EG),(EP) areas ;	AC 220 V, 50/60 Hz
For (EB),(GN) areas ;	AC 230–240 V, 50 Hz
For (GC) area ;	AC 110/127/220/230–240 V, 50/60 Hz
Dimensions :	287(W)/118.5(H)/343.5(D) mm
Weight :	4.4 kg

Note: Specifications are subject to change without notice.
Weight and dimensions are approximate.

System/SC-EH50:

For (E),(EB),(EG) and (EP) areas

Sound processor: SH-EH50, Tuner/Amplifier: SA-EH50, Compact disc player: SL-EH50, Cassette deck: RS-EH60,
Front speakers: *1 SB-EH60

For (GC) area

Sound processor: SH-EH50, Tuner/Amplifier: SA-EH50, Compact disc player: SL-EH50, Cassette deck: RS-EH60,
Front speakers: *2 SB-EH50, Center speaker: *2 SB-PC60, Surround speakers: *2 SB-PS60

Note: *1 ...Made in PAES, *2...Made in MESA

⚠WARNING

This service information is designed for experienced repair technicians only and is not designed for use by the general public. It does not contain warnings or cautions to advise non-technical individuals of potential dangers in attempting to service a product.
Products powered by electricity should be serviced or repaired only by experienced professional technicians. Any attempt to service or repair the product or products dealt with in this service information by anyone else could result in serious injury or death.

Technics®

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■ Before Repair

(1) Turn off the power supply. Using a 10 Ω, 10 W resistor, connect both ends of power supply capacitors (C701, C703 and C702, C704) in order to discharge the voltage.

(2) Before turning the power supply on, after completion of repair, slowly apply the primary voltage by using a power supply voltage controller to make sure that the consumed current at 50/60 Hz in NO SIGNAL mode should be shown below with respect to supply voltage 110V/ 230V/ 240V.

Area	(E) (EG) (EP)	(EB)	(GC)	
Power supply voltage	AC 230 V	AC 240 V	AC 110 V	AC 240 V
Consumed current 50 Hz	70 ~ 250 mA	70 ~ 250 mA	240 ~ 600 mA	70 ~ 250 mA

■ Protection Circuitry

The protection circuitry may have operated if either of the following conditions is noticed:

* No sound is heard when the power is switched ON.
* Sound stops during a performance.

The functions of this circuitry is to prevent circuitry damage if, for example, the positive and negative speaker connection wires are "shorted", or if speaker systems with an impedance less than the indicated rated impedance of this unit are used.

If this occurs, follow the procedure outlined below:

1. Switch OFF the power.
2. Determine the cause of the problem and correct it.
3. Switch ON the power once again.

Note:

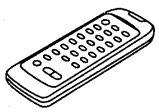
When the protection circuitry functions, the unit will not operate unless the power is first switched OFF and then ON again.

■ Accessories

- **AC power supply cord**
  For (E)/(EP),(EG) and (GC) areas: (RJA0019-X) .... 1 pc.
  For (EB) area: (RJA0053-1X) ..... 1 pc.

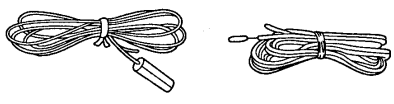
For (E)/(EP),(EG) and (GC) areas For (EB) area

- **Remote control transmitter**
  For (E)/(EP),(EB) and (EG) areas: (RAK-CH426WH) ... 1 pc.
  For (GC) area: (RAK-CH220WH) ..... 1 pc.



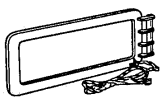
- **Speaker cords**
  (REE0499) ..... 2 pc.

- **FM indoor antenna**
  For (E)/(EP),(EB) and (EG)areas: (RSA0007) .. 1 pc.
  For (GC) area: (RSA0006) ..... 1 pc.



For (E),(EG),(EG) and (EP) areas For (GC) area

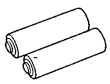
- **AM loop antenna**
  (RSA0012) ..... 1 pc.



- **Antenna holder**
  (RMN0244) ..... 1 pc.

- **Mounting screw**
  (XTN3+12AFZ) ..... 1 pc.

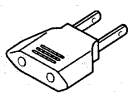
- **Batteries**
  (UM-4, "AAA", R03) ..... 2 pc.
  Note: These are available on sales route.



- **Antenna plug adaptor**
  (SJP9009) ..... 1 pc.

(EB) area only

- **AC plug adaptor**
  (SJP5213-1) ..... 1 pc.



(GC) area only

■ Caution for AC Main Lead

("EB" area code model only)

For your safety, please read the following text carefully.

This appliance is supplied with a moulded three pin mains plug for your safety and convenience.
A 5-ampere fuse is fitted in this plug.
Should the fuse need to be replaced please ensure that the replacement fuse has a rating of 5-ampere and that it is approved by ASTA or BSI to BS1362.
Check for the ASTA mark ⓐ or the BSI mark ♆ on the body of the fuse.

If the plug contains a removable fuse cover you must ensure that it is refitted when the fuse is replaced.
If you lose the fuse cover the plug must not be used until a replacement cover is obtained.
A replacement fuse cover can be purchased from your local dealer.

CAUTION!
IF THE FITTED MOULDED PLUG IS UNSUITABLE FOR THE SOCKET OUTLET IN YOUR HOME THEN THE FUSE SHOULD BE REMOVED AND THE PLUG CUT OFF AND DISPOSED OF SAFETY.
THERE IS A DANGER OF SEVERE ELECTRICAL SHOCK IF THE CUT OFF PLUG IS INSERTED INTO ANY 13-AMPERE SOCKET.

If a new plug is to be fitted please observe the wiring code as shown below.
If in any doubt please consult a qualified electrician.

IMPORTANT

The wires in this mains lead are coloured in accordance with the following code:
Blue: Neutral, Brown: Live.
As these colours may not correspond with the coloured markings identifying the terminals in your plug, proceed as follows:
The wire which is coloured Blue must be connected to the terminal which is marked with the letter N coloured Black or Blue.
The wire which is coloured Brown must be connected to the terminal which is marked with letter L or coloured Brown or Red.

WARNING: DO NOT CONNECT EITHER WIRE TO THE EARTH TERMINAL WHICH IS MARKED WITH LETTER E, BY THE EARTH SYMBOL ⏚ OR COLOURED GREEN OR GREEN/YELLOW.

THIS PLUG IS NOT WATERPROOF–KEEP DRY.

Before use

Removal the connector cover.

How to replace the fuse

The location of the fuse differ accrding to the type of AC mains plug (figures A and B). Confirm the AC mains plug fitted and follow the instructions below.
Illustrations may differ from actual AC mains plug.

1. Open the fuse cover with a screwdriver.

Figure A

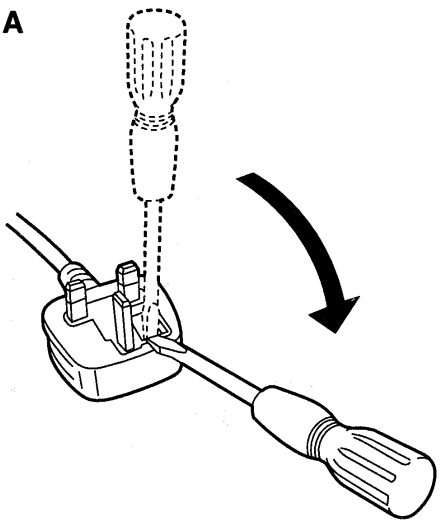
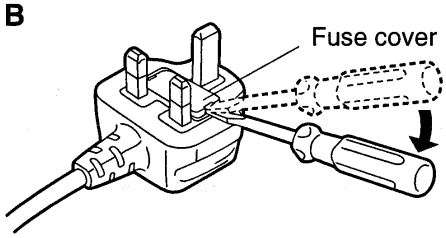


Figure B



2. Replace the fuse and close or attach the fuse cover.

Figure A

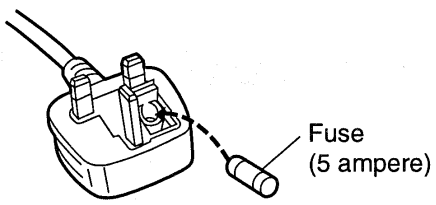
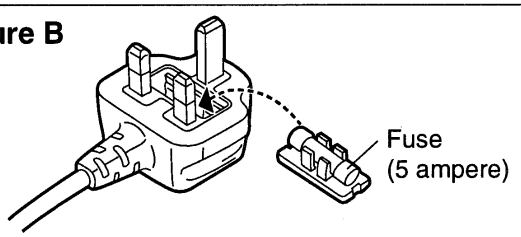


Figure B



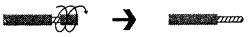
■ Connections

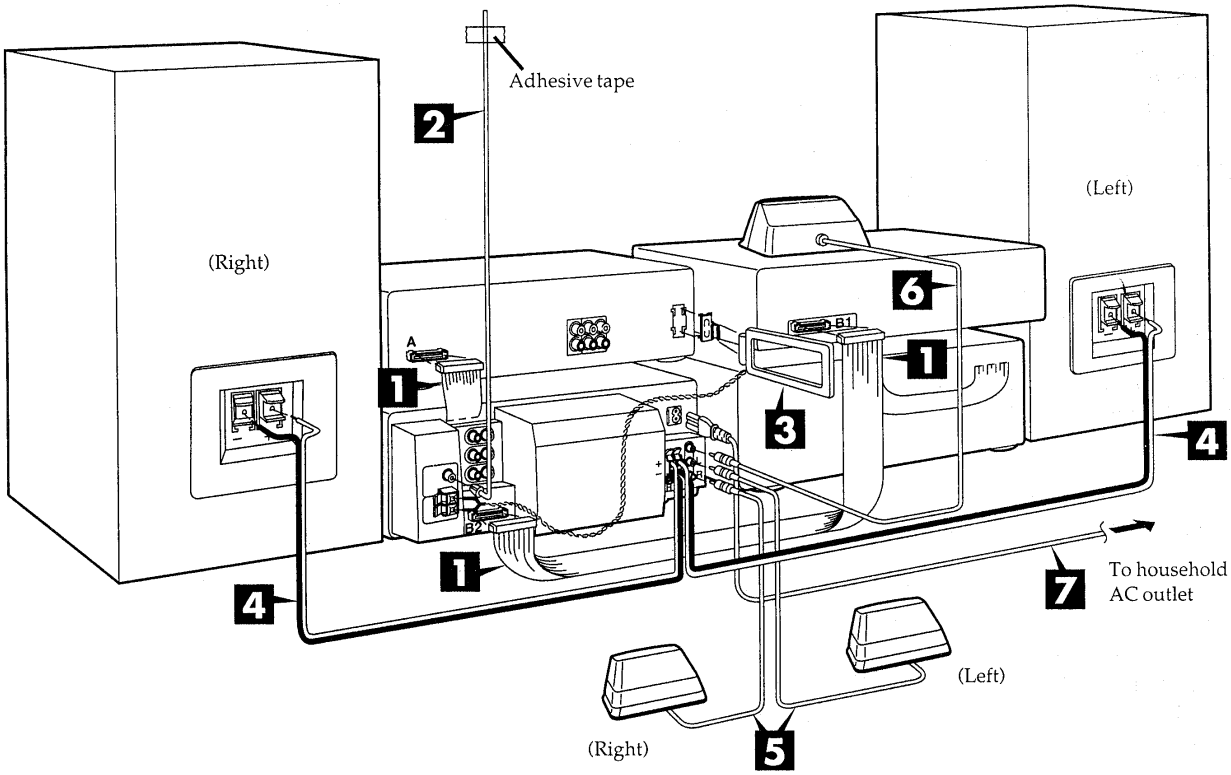
Connect the AC mains lead after you have connected all other cables.

(GC) area only

The configuration of the FM antenna terminal is different.

To prepare the AM loop antenna wire and speaker cords, twist the vinyl cover tip and pull off.





1

To connect cables

Connector

White line

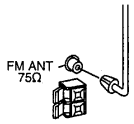
To unplug cables

Hold the connector from both ends and pull it out.

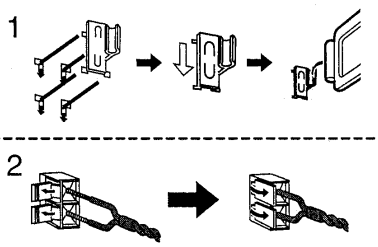
2 **For (GC) area only**

Twist

(For others)

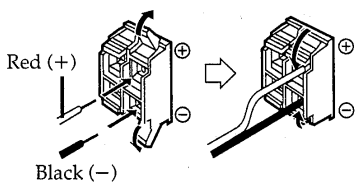


3

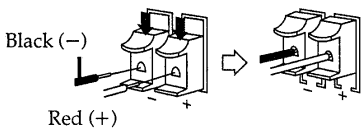


4

Tuner/amplifier side

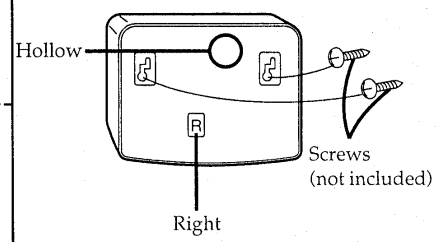


Speaker side



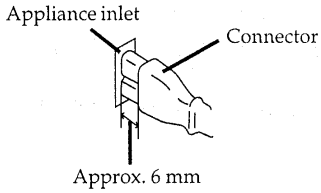
5 **For (GC) area only**

Bottom of the surround speaker



7

(Insertion of Connector)



1 Connect the flat cables.

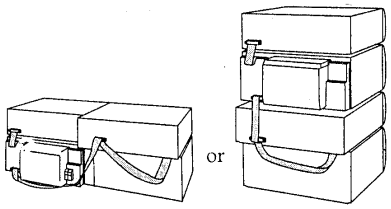
1. Connect the shorter flat cable from the tuner/amplifier to terminal A on the sound processor.
2. Connect the longer flat cable from the cassette deck to terminals B1 and B2.

Note

Do not try connecting or disconnecting the flat cables while the power is switched to ON.

After connection:

Keep cables as flat against the back of the unit as possible.



2 Connect the FM indoor antenna.

Tape the antenna to a wall or column, in a position where radio signals are received with the least amount of interference.

Note

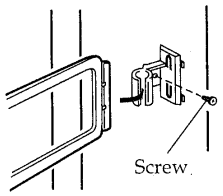
When you cannot get good reception with this FM indoor antenna, we recommend you install an FM outdoor antenna (not included).

3 Connect the AM loop antenna.

•To install on the rear panel of the sound processor.

1. Attach the antenna holder to the rear panel of the sound processor.
   Then clamp the antenna into the antenna holder.
2. Connect the antenna terminal to the rear panel of the tuner/amplifier.

•To install on walls or pillars.



Note

To minimize noise pickup, bundle the loop antenna cord using tape or the like to keep the flat cables away from the AM loop antenna cord.

4 Connect the right (R) and left (L) front speaker cables.

Note

- To prevent damage to circuitry, never short-circuit positive (+) and negative (−) speaker wires.
- Be sure to connect only positive (red) wires to positive (+) terminals and negative (black) wires to negative (−) terminals.
- Left and right front speakers are exactly the same.

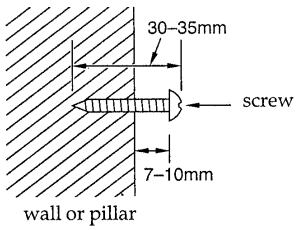
5 For (GC) area only
Connect the surround speaker cables.

Note

- Connect the surround speakers after checking their bottom panels to see which one is for the left channel and which one is for the right channel.
- When the speakers are to be mounted on a wall, select screws which are suited for the type of wall concerned.
- It is recommended that the speaker cords be fitted into the hollows provided on the bottom panels of the surround speakers.

Speaker attachment to wall

Screw the wood screw into a thick and hard part of the wall, leaving 7–10 mm of the screw projecting from the wall surface. (The wall or pillar on which the speaker systems are to be attached should be capable of supporting a weight of 5 kilograms.)



6 For (GC) area only
Connect the center speaker cables.

Note for front/center speakers

These speakers are made so as to be able to be used in close proximity to the TV, but irregular coloring may result due to how the system is placed. If such distortion occurs, turn off the TV for sometime between 15 and 30 minutes. The demagnetizing function of the TV will eliminate the distortion. If the irregular coloring is still visible, then move the speaker further away from the TV.
Please note that if there is a magnetic object near the TV, irregular coloring may result due to the interaction between the TV and the speakers.

7 Connect the AC mains lead.

(United Kingdom only)
BE SURE TO READ THE CAUTION FOR AC MAINS LEAD ON PAGE 3 BEFORE PROCEEDING TO STEP 7 .

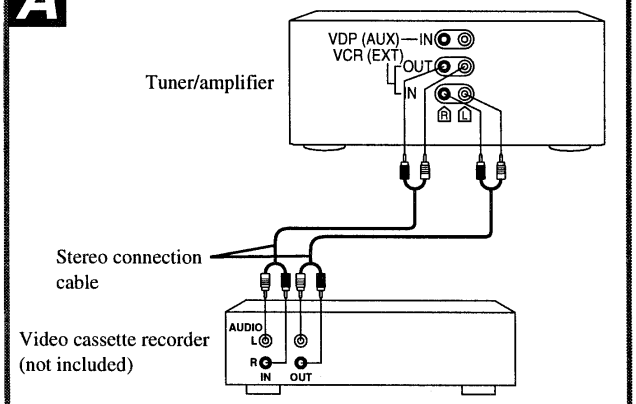
Insertion of Connector

Even when the connector is perfectly inserted, depending on the type of inlet used, the front part of the connector may jut out as shown in the drawing.
However there is no problem using the unit.

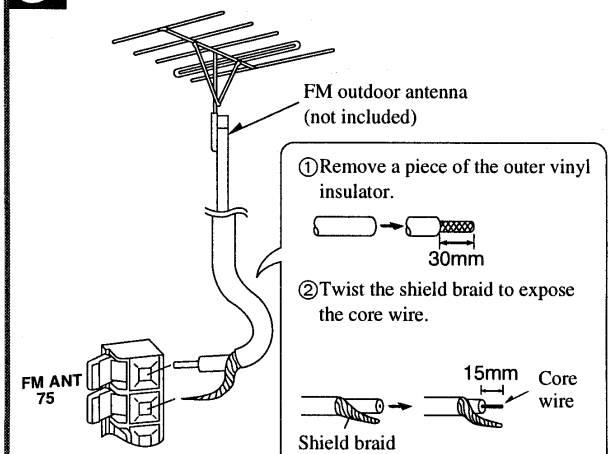
External unit connections

- Make sure that the power supply for all components has been turned off before making any connections.
- For details, refer to the operating instructions of the units which are to be connected.
- All peripheral components and cables sold separately.

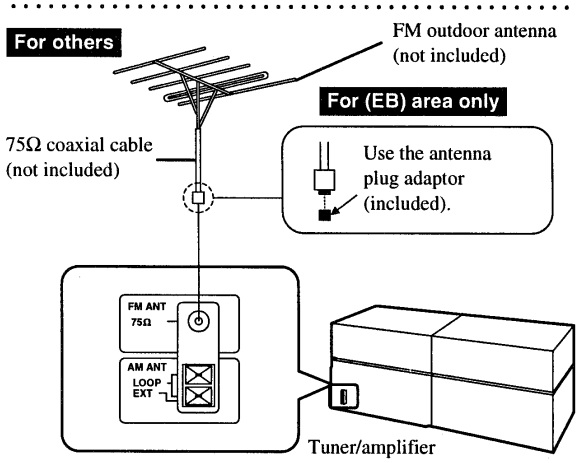
A



C For (GC) area only


FM outdoor antenna (not included)
①Remove a piece of the outer vinyl insulator.
30mm
②Twist the shield braid to expose the core wire.
15mm
Core wire
Shield braid
③Connect the shield braid and the core wire as shown at the left.
FM ANT 75

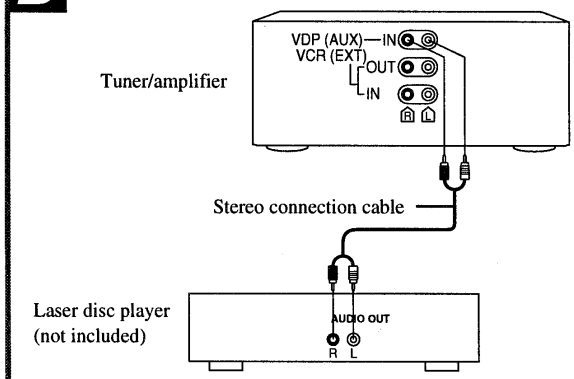
For others


FM outdoor antenna (not included)
For (EB) area only
75Ω coaxial cable (not included)
Use the antenna plug adaptor (included).
FM ANT 75Ω
AM ANT LOOP EXT
Tuner/amplifier

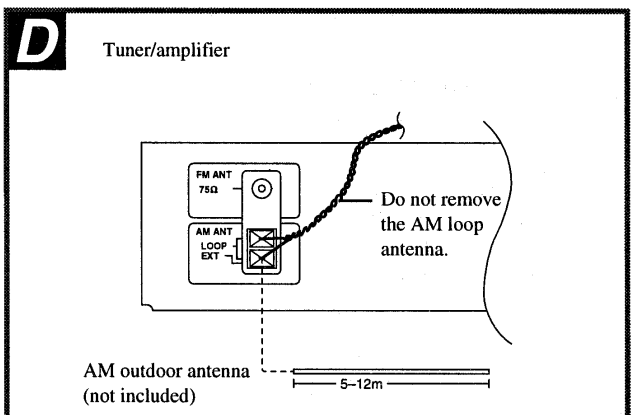
Stereo connection cable
White (L)
Red (R)

A Video Cassette recorder
B Laser disc player

B



D



Optional antenna connections

You may need an outdoor antenna if you use this system in a mountainous region or inside a reinforced-concrete building, etc.

FM outdoor antenna (not included) C

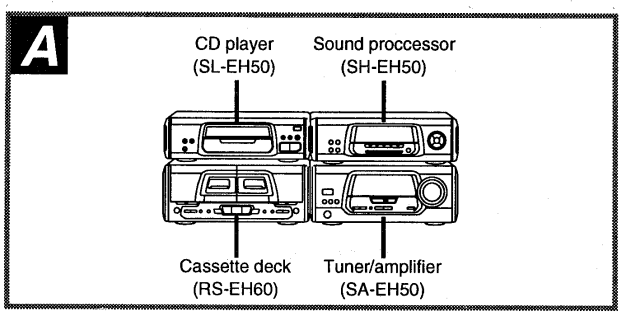
Note
An outdoor antenna should be installed by a qualified technician only.

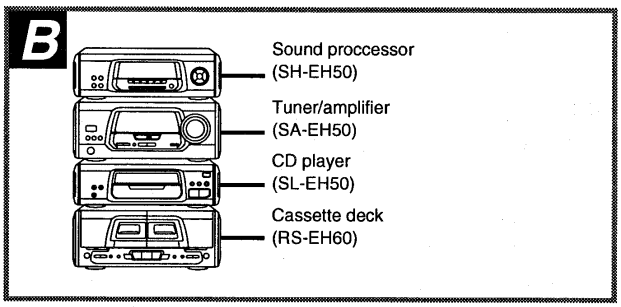
AM outdoor antenna (not included) D

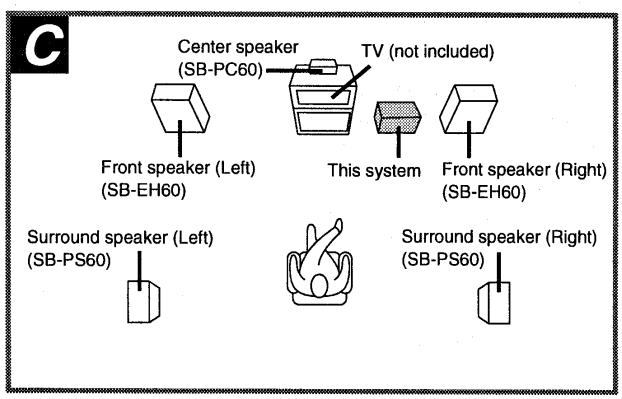
Connect the outdoor antenna without removing the AM loop antenna. Run 5 to 12 m of vinyl-covered wire horizontally along a window or other convenient location.

Note
When the unit is not in use, disconnect the outdoor antenna to prevent possible damage that may be caused by lightning. Never use an outdoor antenna during an electrical storm.

■ Installation







Locating the components

Side-by-side set-up A
Stacking B

Placement of speakers C

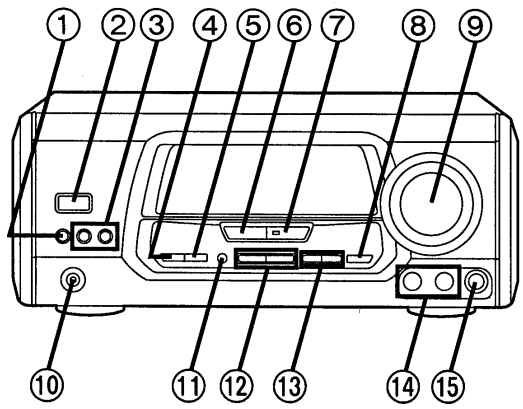
(GC) area only

As well as enjoying normal stereo reproduction with the left and right front speakers, a center speaker and surround speakers can also be connected to the unit in order to enjoy the sound performance of DOLBY PRO LOGIC Systems.

We recommend that surround speakers be placed on the side of or slightly behind the listener, and about one meter higher than ear level.
However the position should be adjusted to your personal preference, because the effect varies to some degree depending upon the type of music and the music source.

Caution
Use the speakers only with the recommended system. Failure to do so may lead to damage to the amplifier and/or the speaker, and may result in the risk of fire. Consult a qualified service person if damage has occurred or if you experience a sudden change in performance.

■ Location of Controls

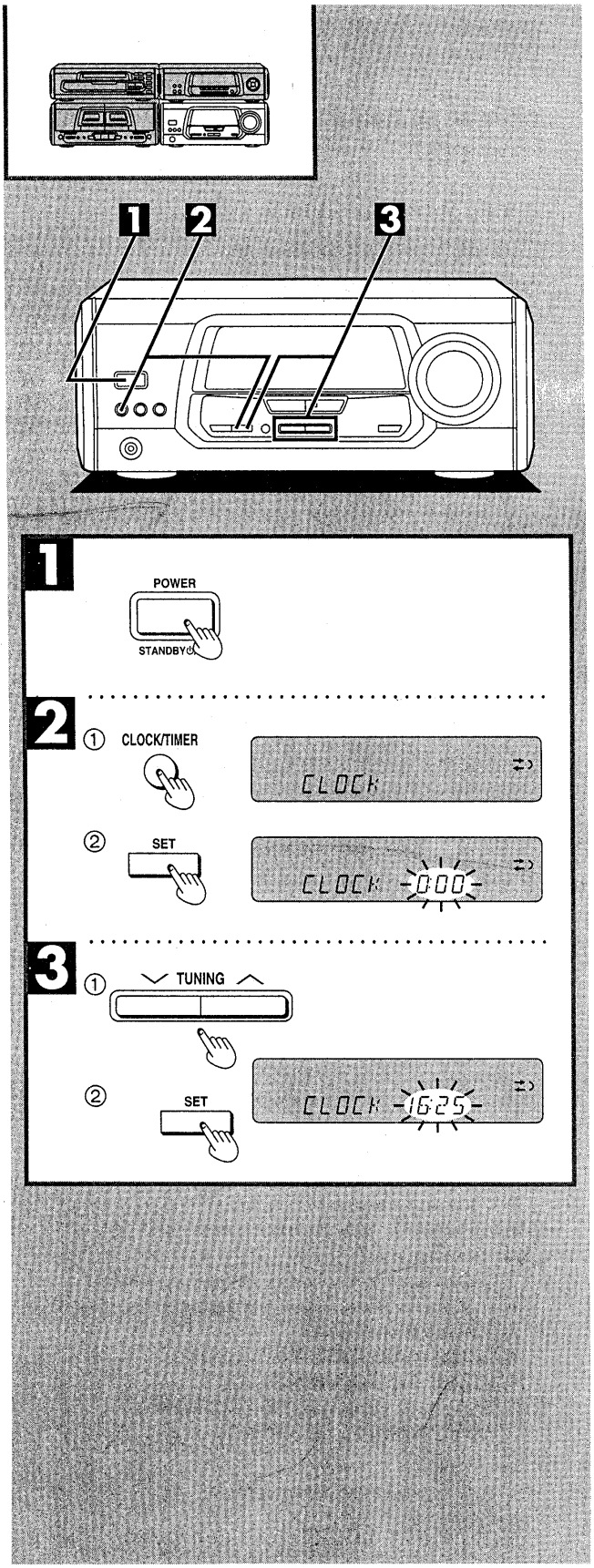


① Clock/timer button (CLOCK/TIMER)
② Power "STANDBY ⏻ /ON" switch (POWER, STANDBY ⏻ /ON)
③ Timer on/off buttons (◴ PLAY, ◴ REC)
④ Tuning mode select button (TUNING MODE)
⑤ Set button (SET)
⑥ Source input select button (INPUT SELECTOR)
⑦ Tuner/band select button and indicator (TUNER/BAND)
⑧ V.bass button (V.BASS)
⑨ Volume control (VOLUME)
⑩ Headphones jack (PHONES)
⑪ FM mode select button (FM AUTO/MONO)
⑫ Tuning buttons (∨, ∧ ,TUNING)

For (EG) and (EP) areas
⑬ RDS display mode select buttons

For (GC) area
⑬ KARAOKE and Echo buttons)KARAOKE, ECHO)
⑭ Microphone jacks (MIC, 1, 2)
⑮ Microphone volume control (MIC VOL)

■ Setting the Time



The tuner/amplifier displays the time, frequency and other information on CDs and tapes.

This is a 24-hour display clock.

These instructions explain how to set the timer for 16:25.

1 Switch on the power.

2 ① Press CLOCK/TIMER to show "CLOCK".

Every time you press the button, the indication changes in the order of CLOCK→◴ PLAY→◴ REC→Original display.

Within 5 seconds:

② Press SET.

3 ① Press TUNING (∨ or ∧) to set the present time on the display.

The time display can be changed in one minute units by tapping the buttons, and quickly by holding down the buttons.

② Press SET.

The display will return to the previous display after about 3 seconds.

When "––:––" appears:

It appears when you connect the AC power supply cord for the first time or if there has been a power failure.
Reset the time as explained above.

If the minutes setting is off:

1. Press CLOCK/TIMER.
2. Press SET.
3. Press TUNING (∨ or ∧) to set the minutes, and then press SET.

To display the clock again:

Press CLOCK/TIMER.
The clock display will appear for about 5 seconds.

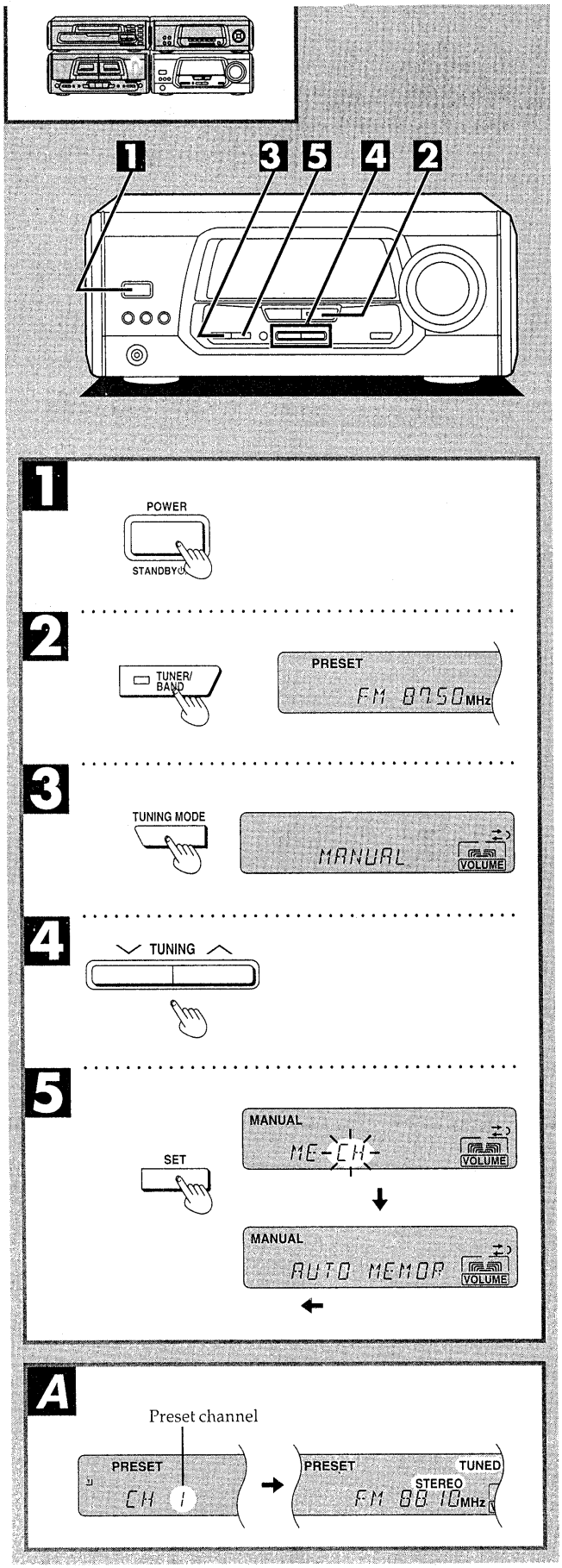
For your reference:

When you turn OFF the system from the POWER button, the system goes on standby.

Demo function while the power is on:

When the input source is set to "CD" or "TAPE", the demo function will run automatically after about 2 minutes or more in the stop mode.
You can cancel the demo function by pressing and holding DISP MODE/–DEMO for about 2 seconds or more while the automatic demo function is activated.

■ Memory Presetting



- Once stations have been preset, you can easily select them from the tuner/amplifier or the remote control.
- You can preset a total of 39 stations between the FM and AM bands.
- Stations can be set automatically or manually.

Automatic memory presetting

The frequencies are automatically preset (in sequence from lower to higher frequencies) into the memory: "channels" 1 to 39 are available for the presetting of FM stations and "channels" 21 to 39 are available for AM stations.

This example in the figure shows how to preset FM stations.

1 Switch on the power.

2 Press TUNER/BAND to select the desired band.
Each time you press this button, "FM" and "AM" will appear alternately.

3 Press TUNING MODE to select "MANUAL".
Each time you press this button, "MANUAL" and "PRESET" will appear alternately.

4 Press and hold TUNING (∨ or ∧) until the display shows the frequency from which you want to begin automatic memory presetting.
Press TUNING (∨ or ∧) momentarily to stop scrolling when the displayed frequency approaches the desired frequency. Tap TUNING (∨ or ∧) a few times until the desired frequency is reached.

5 Hold down SET.
Release your finger when the words "AUTO MEMORY" scroll across the display.

The "ME" in the display will then flash while the tuner/amplifier is storing the received frequency in memory. When storing is complete, "SET OK" will be displayed.

To confirm the preset stations: A

1. Press TUNING MODE to select "PRESET".
2. Press TUNING (∨ or ∧).

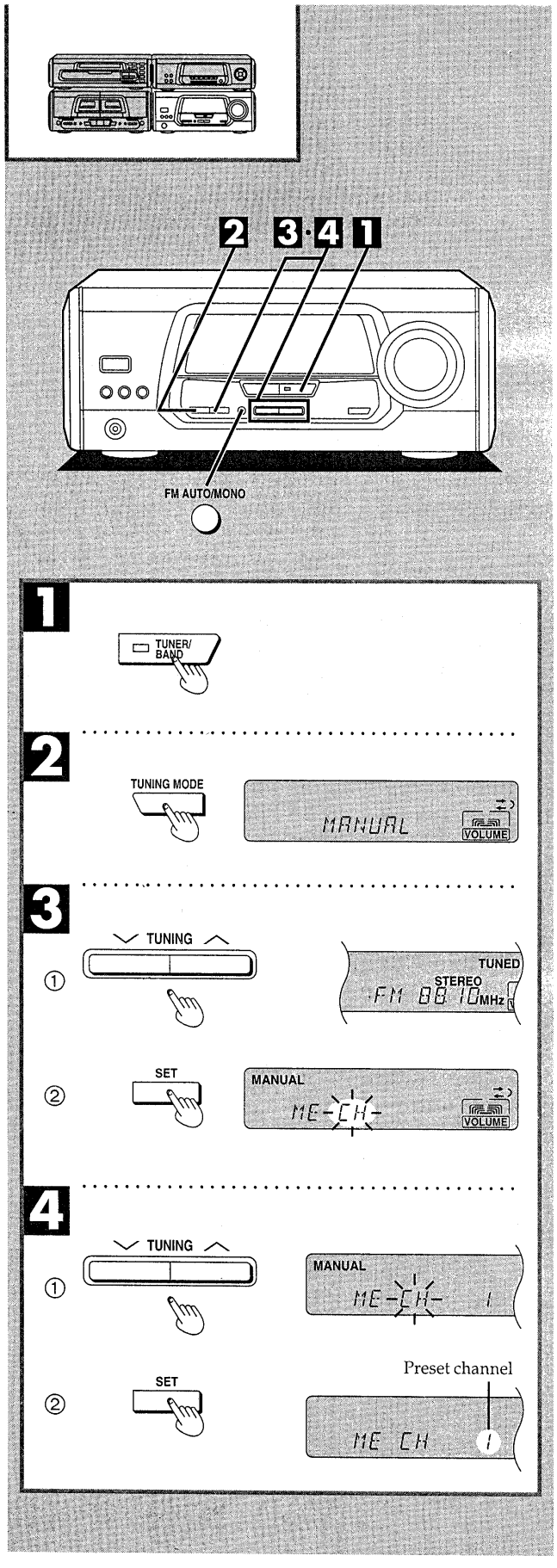
"STEREO" lights when an FM stereo broadcast is being received.
"TUNED" lights when you precisely tune in a broadcast station.

When "ERROR" appears:

Automatic memory presetting does not work when radio waves from the broadcasting station are too strong or too weak.
In such case, carry out presetting manually.

Note

When you preset a broadcast station to a channel that has already been preset, the previous presetting will be erased. So if, for example, FM frequencies are preset from channel 1 to 39 and then AM frequencies are preset, the first AM frequency will be preset to channel 21 (thus erasing the FM presetting to channel 21), the second AM frequency will be preset to 22 (erasing FM 22), and so on.



Manual memory presetting

This example in the figure shows how to store FM 88.10 MHz into preset channel 1.

1 Press TUNER/BAND to select the desired band.
Each time you press this button, "FM" and "AM" will appear alternately.

2 Press TUNING MODE to select "MANUAL".
Each time you press this button, "MANUAL" and "PRESET" will appear alternately.

3 ① Press TUNING (∨ or ∧) to tune in the desired broadcast.
"STEREO" lights when an FM stereo broadcast is being received.
"TUNED" lights when you precisely tune in a broadcast station.

Automatic scanning:
Press and hold TUNING (∨ or ∧) until the displayed frequency starts to scroll.
- The scrolling of the displayed frequency will automatically stop if a broadcast station frequency is located during the tuning process.
- When there is excessive interference, the automatic scanning may not function.

To cancel the automatic scanning, press TUNING (∨ or ∧) once again.

② Press SET momentarily.
"CH" flashes.

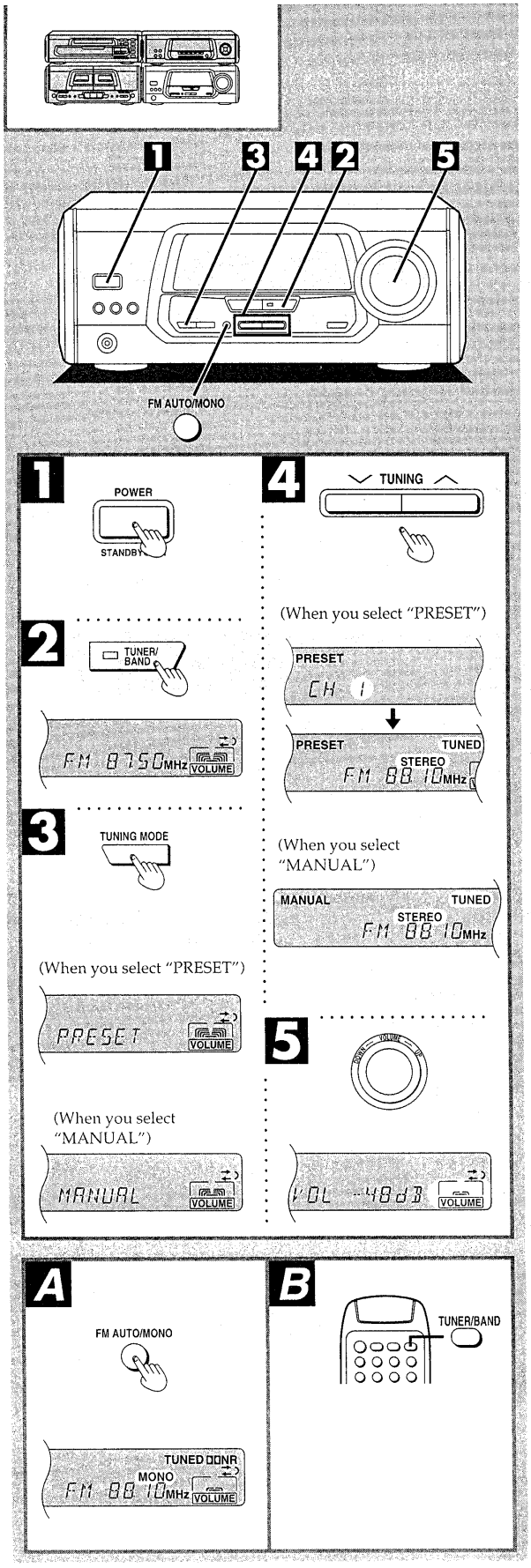
4 ① Press TUNING (∨ or ∧) to select the desired preset channel
② Press SET momentarily.
"CH" lights and the display returns to the frequency after about two seconds.

To continue presetting:
Repeat steps 1 through 4.

To preset FM stations in monaural position:
1. Select the desired frequency.
2. Press FM AUTO/MONO.
   "MONO" will light.
3. Follow steps 3-② and 4 above.

For your reference:
Even if the power cord is disconnected from the household AC outlet, the memory will retain its contents for approximately 2 weeks.

■ Listening to Radio Broadcasts



Listening to radio broadcasts

This example in the figure shows how to tune in FM stations.

1 Switch on the power.

2 Press TUNER/BAND to select the desired band.
Each time you press this button, "FM" and "AM" will appear alternately.

3 Press TUNING MODE to select "PRESET" or "MANUAL".
Each time you press this button, "MANUAL" and "PRESET" will appear alternately.
- Select "PRESET" when stations are preset.
- Select "MANUAL" when stations are not preset.

4 Press TUNING (∨ or ∧) to tune in the desired broadcast.
"STEREO" lights when an FM stereo broadcast is being received.
"TUNED" lights when you precisely tune in a broadcast station.

Automatic scanning (when you select "MANUAL" in step 3):
Press and hold TUNING (∨ or ∧) until the displayed frequency starts to scroll.
- The scrolling of the displayed frequency will automatically stop if a broadcast station frequency is located during the tuning process.
- When there is excessive interference, the automatic scanning may not function.

To cancel the automatic scanning, press TUNING (∨ or ∧) once again.

5 Adjust the volume level as you like.

For tuning by remote control (when you select "PRESET" in step 3 above):
Specify the channel you want with the numeric buttons.

To select a two-digit channel:
Press ≥10 and then the two numbers you want within 10 seconds or so.

Note
When the FM station is preset to "MONO", the "STEREO" indicator will not light up even if a stereo broadcast is being received.

If noise is excessive in the FM stereo mode: A

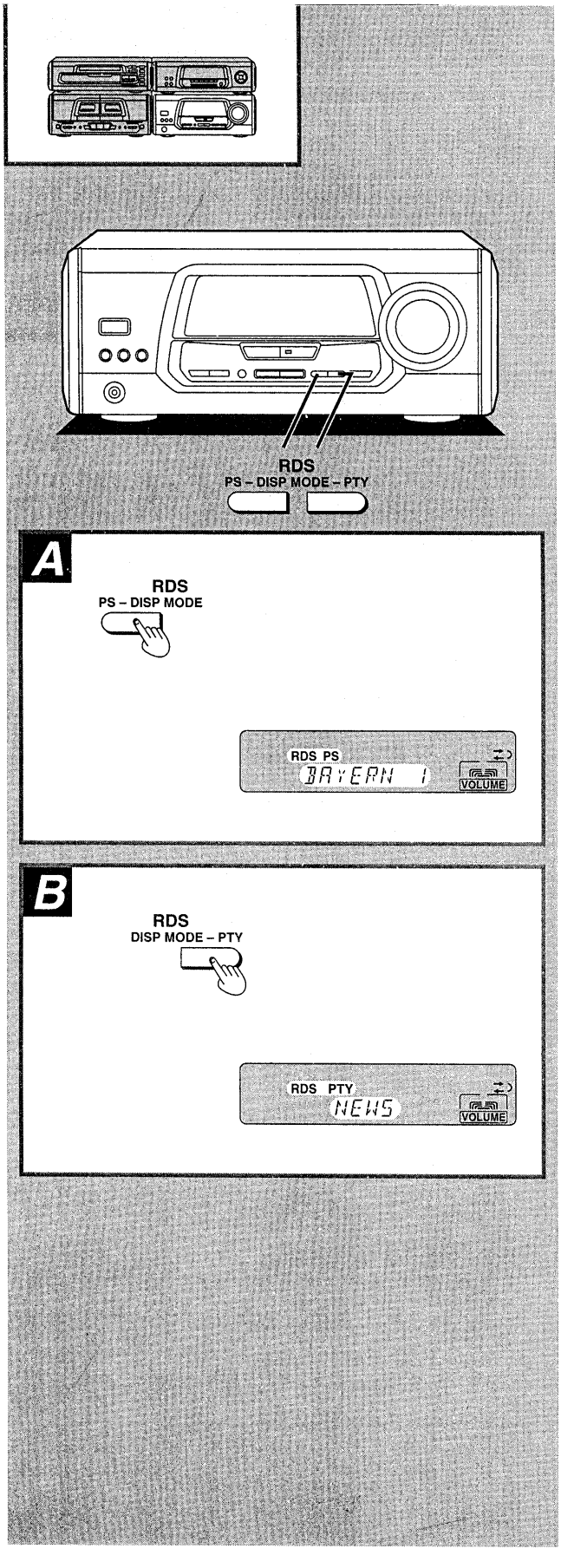
Press FM AUTO/MONO.
The sound reception mode switches to "MONO" (monaural) and "MONO" lights.
The sound will then be heard in monaural. If the broadcast signal is weak, or if there is a large amount of interference, you will get a clearer sound using MONO function.
To cancel the "MONO" mode, press the button again.

When "MONO" indicator goes off:
Use this setting for normal listening. Both stereo and monaural sounds can be heard as they are.

Note
If you change frequencies in the "MONO" mode, the "MONO" mode will be cancelled.

One-touch play B
When the system is OFF, you can receive the station last tuned in when you press TUNER/BAND on the remote control. Play will start with volume increasing gradually.

■ Enjoying RDS Broadcasts [For (EG) and (EP) areas]



This unit lets you take advantage of the Radio Data System (RDS) in areas where RDS broadcast services are received. This advanced system provides useful information, utilizing a 57 kHz subcarrier above the audible range, in addition to the main FM signal.

Types of RDS and functions

To display the name of a broadcast station (PS display):

When this system receives a PS signal in an RDS broadcast, the name of the broadcast station is shown on the display.

To display the type of a program (PTY display):

While the PTY signal is being received, the name of the type of program currently being broadcast can be shown on the display.

Notes

- Even if an FM broadcast station is transmitting RDS signals, the functions of this system may not be able to utilize these signals if the signal quality is too poor.
- "PTY" may not be available in some areas. (Future function)

To display the name of a broadcasting station A

(When th FM station is received)

Press PS-DISP MODE.

If the FM broadcast being received provides the RDS service ("RDS" indicator will light), the name of the broadcast station and "PS" indicator will be shown on the display of this system.

Each time you press the button, frequency display and PS display will appear alternately.

To display the type of a program B

(When the FM station is received)

Press DISP MODE-PTY.

If the FM broadcast being received provides the RDS service ("RDS" indicator will light), the type of the program and "PTY" indicator will be shown on the display of this system.

Each time you press the button, frequency display and PTY display will appear alternately.

When "NO RDS" is displayed

If the FM broadcast being received does not provide RDS service, "NO RDS" will be displayed when the PS display mode or PTY display mode is selected.

Note

When receiving a broadcast station, in PTY mode, which does not transmit PTY, the display will not show "NO PTY" automatically. The same also applies to "NO RDS" when RDS is not transmitted.

About the PTY display

There are a total of 15 PTY displays on this unit. The table gives an explanation of each display.

Display	Explanation
NEWS	Short accounts of facts, events and publicly expressed views, reportage and actuality.
AFFAIRS	Topical program expanding or enlarging upon the news, generally in different presentation style or concept, including documentary debate, or analysis.
INFO	Program whose purpose is to impart advice in the widest sense, including meteorological reports and forecasts, consumer affairs, medical help, etc.
SPORT	Program concerned with any aspect of sport.
EDUCATE	Program intended primarily to educate.
DRAMA	All radio plays and serials.
CULTURE	Programs concerned with any aspect of national or regional culture, including religious affairs, philosophy, social science, language, theatre, etc.
SCIENCE	Programs about the natural sciences and technology.
VARIED	Used for mainly speech-based programs, usually of a light-entertainment nature not covered by above categories. Examples are: quizzes, panel games, personality interviews, comedy and satire.
POP M	Commercial music which would generally be considered to be of current popular appeal, often featuring in current or recent record sales charts.
ROCK M	Contemporary modern music, usually written and performed by young musicians.
M.O.R.M	(Middle of the Road Music). Common term to describe music considered to be "easy-listening", as opposed to Pop, Rock or Classical. Music in this category is often, but not always, vocal, and usually of short duration (<5 min.).
LIGHT M	Classical Musical for general, rather than specialist, appreciation. Examples of music in this category are instrumental music and vocal or choral works.
CLASSICS	Performances of major orchestral works, symphonies, chamber music etc., and including Grand Opera.
OTHER M	Musical styles not fitting into any of the above categories. Particularly used for specialist music, of which Jazz, Rhythm & Blues, Folk, Country, and Reggae ar examples.

■ Operation Checks and Main Component Replacement Procedures

NOTE

1. **This section describes procedures for checking the operation of the major printed circuit boards and replacing the main components.**
2. **For reassembly after operation checks or replacement, reverse the respective procedures. Special reassembly procedures are described only when required.**
3. **Select items from the following index when checks or replacement are required.**
4. **Refer the parts No. on the page of "Main Component Replacement Procedures", if necessary.**

• Contents

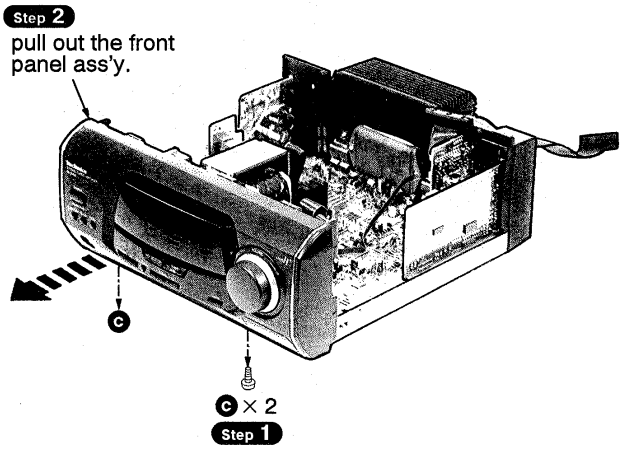
• Checking procedures for eack P.C.B. Page.

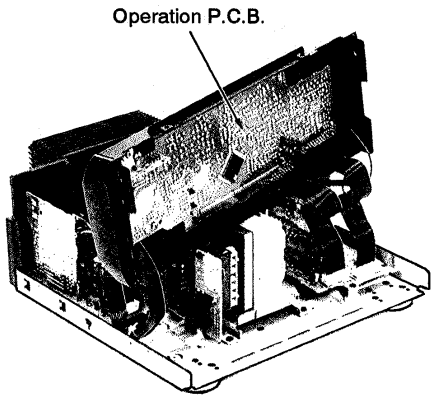
1. Checking for the tuner P.C.B. and power supply P.C.B.. • • •

2. Checking for the operation P.C.B.

• Follow the Step 1 ~ Step 3 of the item 1 in checking procedure for each P.C.B. on page 14.

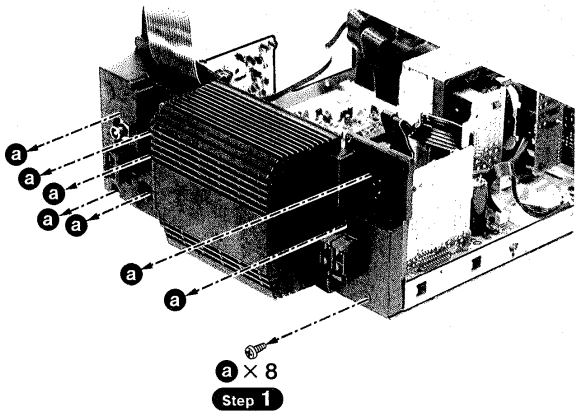
• **Check the operation P.C.B. as shown below.**

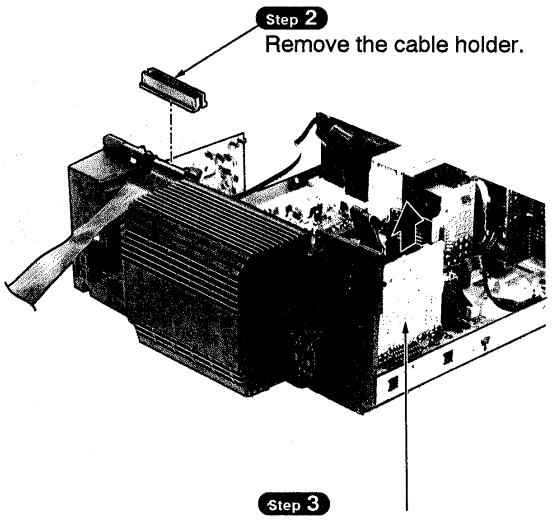


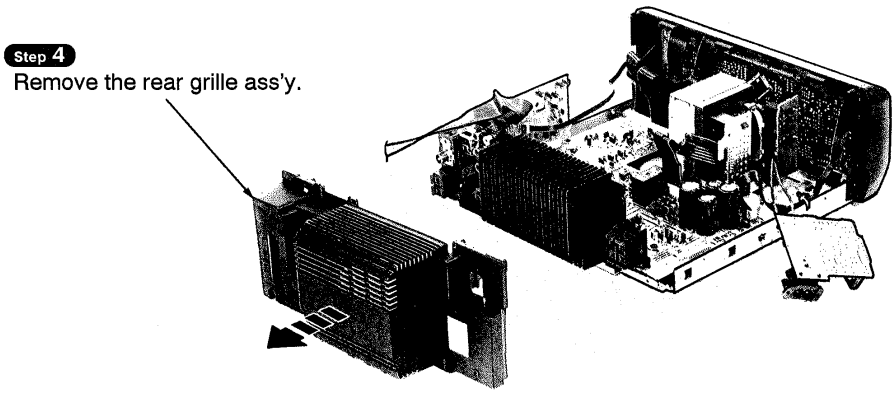


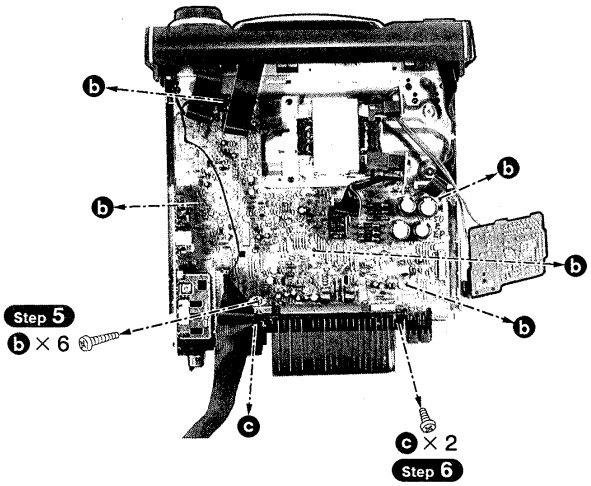
3. Checking for the main P.C.B.

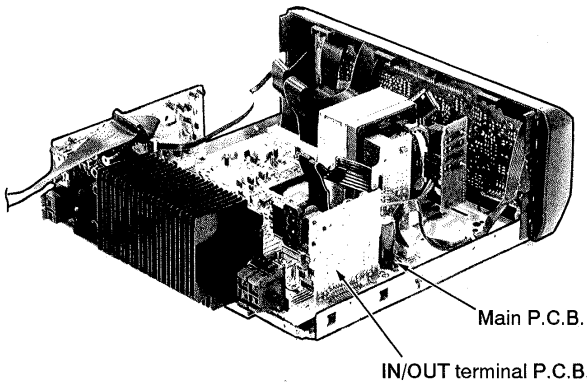
• Follow the Step 1 ~ Step 3 of the item 1 in checking procedure for each P.C.B. on page 14.





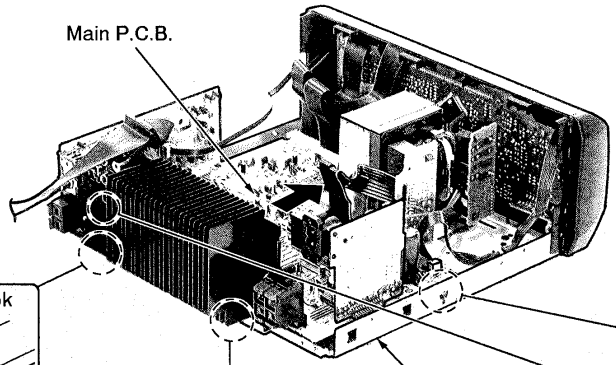




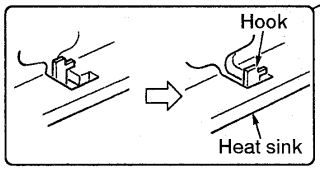


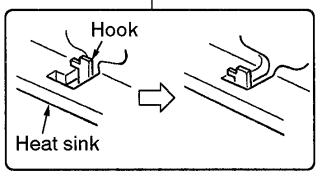
Step 7
Reinstall the IN/OUT terminal P.C.B. to the main P.C.B..

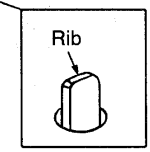
Step 9
Slide the main P.C.B. in the direction of arrow, and then release the hook of bottom chassis.

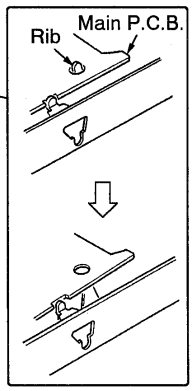


Step 8
Lift up the main P.C.B., and then release the 2 ribs of bottom chassis to remove the main P.C.B..

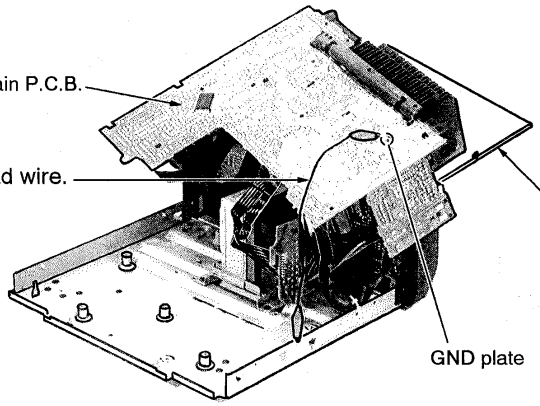








• Check the main P.C.B. as shown below.



Step 10
Connect the lead wire.

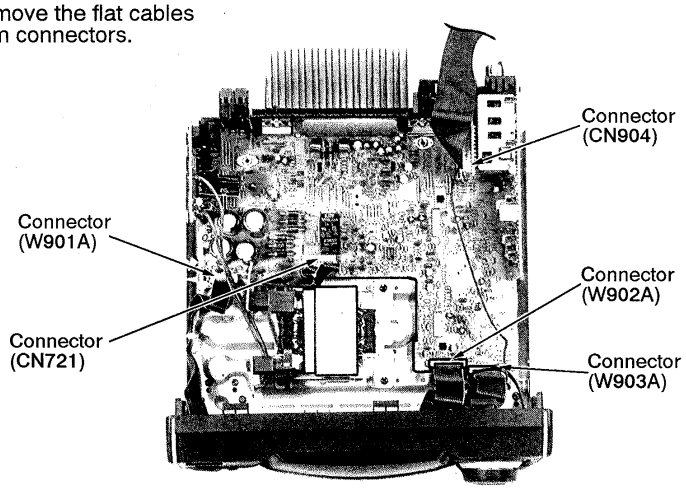
NOTE
Insulate main P.C.B. with insulation material to avoid short-circuit.

■ Main Component Replacement procedures

1. Replacement for the power IC and regulator transistor

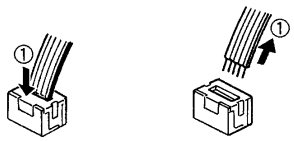
- Follow the Step 1 ~ Step 3 of the item 1 in checking procedure for each P.C.B. on page 14.
- Follow the Step 1 ~ Step 9 of the item 3 in checking procedure for each P.C.B. on pages 15 and 16.

Step 1
Remove the flat cables from connectors.

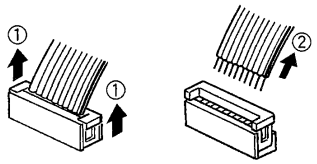


■ Removal of the connector

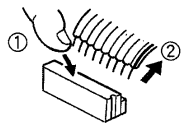
- Connector (CN904)

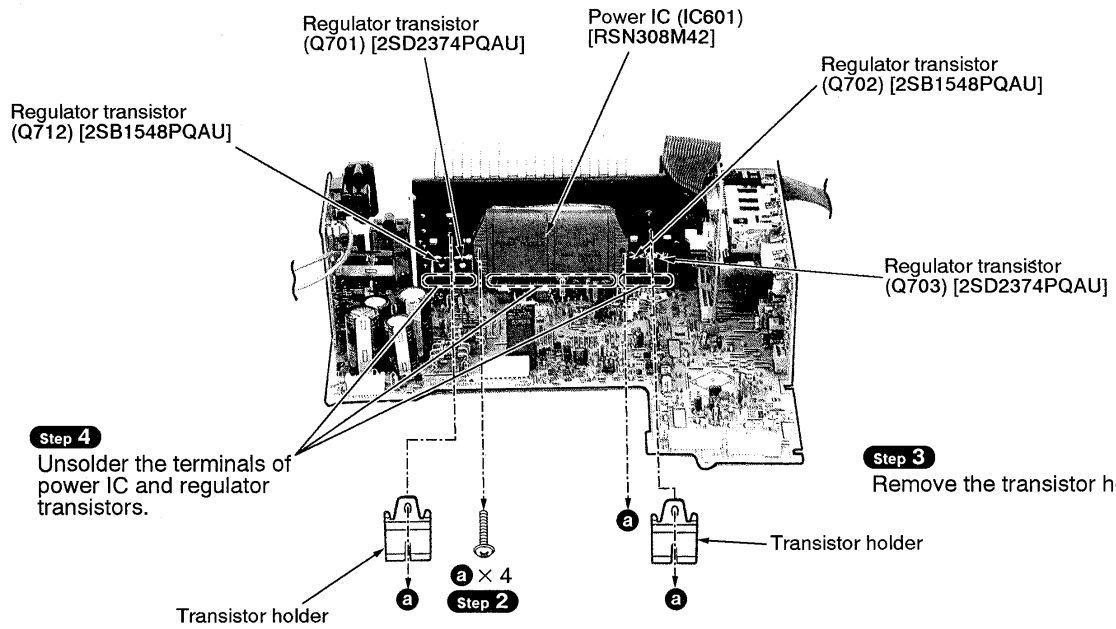


- Connectors (W901A, W902A, W903A)



- Connector (CN721)





NOTE
When mounting the power IC or regulator transistor apply silicone conpound (RFKX0002) to the rear side of power IC or regulator transistors.

■ To Supply Power Source

Power Supply to This Unit Alone

1. Short the section between **7 pin** and **10 pin** of the connector **W202** in Fig. 1.
2. Connect this unit to an AC Power Cord. (This unit come to stand-by mode.)
3. Turn the unit ON.

To check Operation

1. Set this unit to Power ON mode.
2. Input a signal and confirm it to be outputted from the speaker terminal.

	INPUT	OUTPUT
L-ch	VDP(AUX) or VCR(EXT)	L-ch speaker terminal
R-ch	VDP(AUX) or VCR(EXT)	L-ch speaker terminal
Surround	VDP(AUX) or VCR(EXT)	Surround speaker terminal
Center	VDP(AUX) or VCR(EXT)	Center speaker terminal

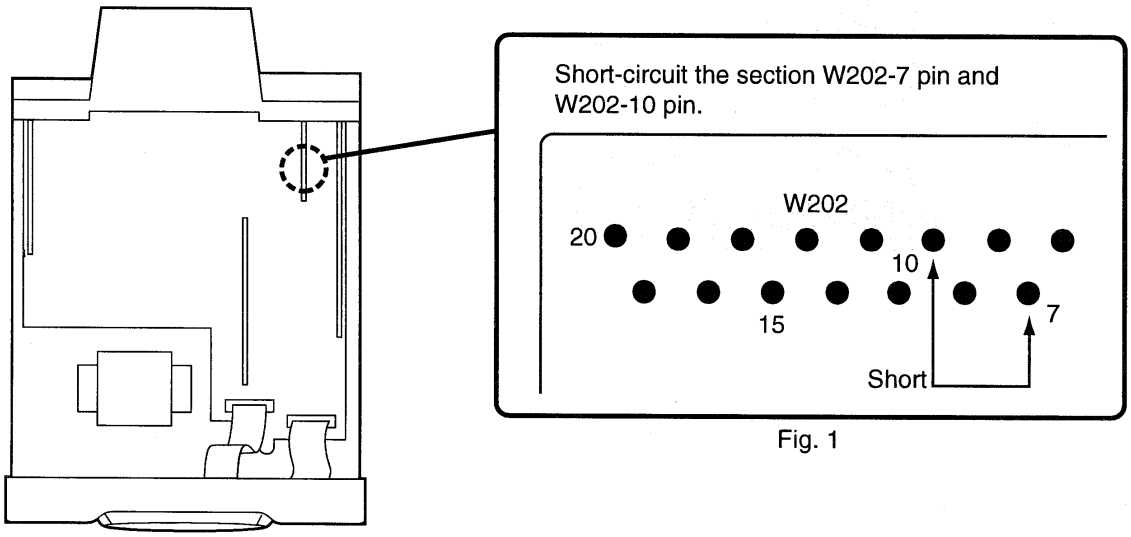
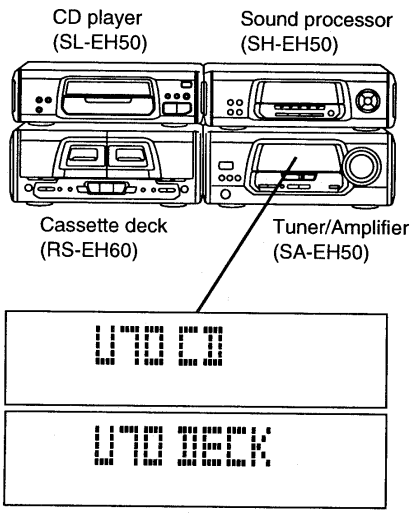


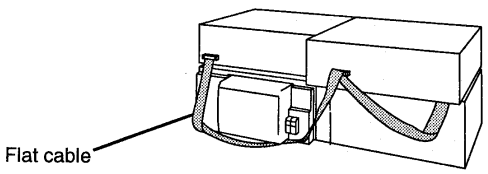
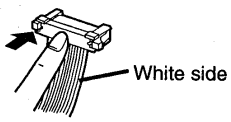
Fig. 1

■About the Self-Diagnostic Mode

This unit is equipped with a self-diagnostic function which, in the event of a malfunction, automatically displays a code indicating the nature of the malfunction. Use this self-diagnostic function when servicing the unit.

Display method	Display location
To display the malfunction code U-70 CD: U-70 DECK: ..... Automatically displays on the tuner/sound processor when a malfunction occurs. F-61 ..... Automatically displays on the tuner/sound processor when a malfunction occurs. **To return to the normal display** **1. For U-70 CD/U-70 DECK:** ● Press an any operation button on the tuner/amplifier. ● To re-display the code, switch the power off (POWER STANDBY button), and then switch power back on again. **2. For F-61:** ● If "F-61" is displayed, the power will automatically be switched off and the standby indicator will light up. ● "F-61" will be displayed for 3 seconds, and then the clock will be displayed. ● To re-display the code, switch the power on. "F-61" will be re-displayed, and then after 3 seconds the clock will be displayed and the power will automatically switch off.	

Display contents

Display code	Problem or condition	Correction procedure
U-70 CD **U-70 DECK** (displayed automatically)	A bus-line communications error has occurred as a result of the flat cables being inserted incorrectly, thus preventing the system from operating. 1.If "U-70" is displayed on the tuner/amplifier, the tape deck or CD Changer cannot be operated by remote control.	 1. To check for correct insertion of the flat cables. ①Insert each connector until you hear a click. ②Insert the flat cables at the back of the unit in the order indicated. Make sure the white side of the cable is on your right side.  2. Breakage of flat cable. (Check and replace as necessary.) 3. If the problem is not corrected by items (1.) and (2.) above, this indicates a faulty IC. **SA-EH50:** IC901 (M38199MF100K) **SL-EH50:** IC403 (LC66356B4J28) **RS-EH60:** IC701 (M37471M4660F) Check these IC's and replace as necessary.
F-61	When the power switch is switched on, it automatically switches back off, making it impossible to switch power on.	● Faulty Tuner/Amplifier (SA-EH50) output IC (IC601). (When a DC voltage is applied to the speaker terminals.)

■ Schematic Diagram

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F MAIN CIRCUIT	32 ~ 38
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H POWER TRANSFORMER (A) CIRCUIT	38
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For (GC) area only

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I POWER TRANSFORMER (B) CIRCUIT	39

For (EG) and (EP) areas

J RDS CIRCUIT	40

- **This schematic diagram may be modified at any time with the development of new technology.**

Notes:

- **S901** : Power "STANDBY ⏻ /ON" switch (POWER STANDBY ⏻ /ON)
- **S902** : Clock/timer switch (CLOCK/TIMER)
- **S903** : Record timer switch (◴ REC)
- **S904** : Play timer switch (◴ PLAY)
- **S905** : Tuning mode select switch (TUNING MODE)
- **S906** : Set switch (SET)
- **S907** : FM mode select switch (FM AUTO/MONO)
- **S908** : Source input select switch (INPUT SELECTOR)
- **S909** : Tuning down switch (TUNING ∨)
- **S910** : Tuning up switch (TUNING ∧)
- **S911** : Tuner/band select switch (TUNER/BAND)
- **S912** : V.bass switch (V.BASS)
- **VR901** : Volume control (VOLUME)

For (EG) and (EP) areas

- **S913** : RDS display mode select switch (PS)
- **S914** : RDS display mode select switch (PTY)

For (GC) area

- **S701** : Voltage adjust switch
- **S913** : Karaoke switch (KARAOKE)
- **S914** : Echo switch (ECHO)
- **VR401** : Microphone volume control (MIC VOL)

- Indicated voltage values are the standard values for the unit measured by the DC electronic circuit tester (high-impedance) with the chassis taken as standard. Therefore, there may exist some errors in the voltage values, depending on the internal impedance of the DC circuit tester.
  No mark: FM ( ): AM

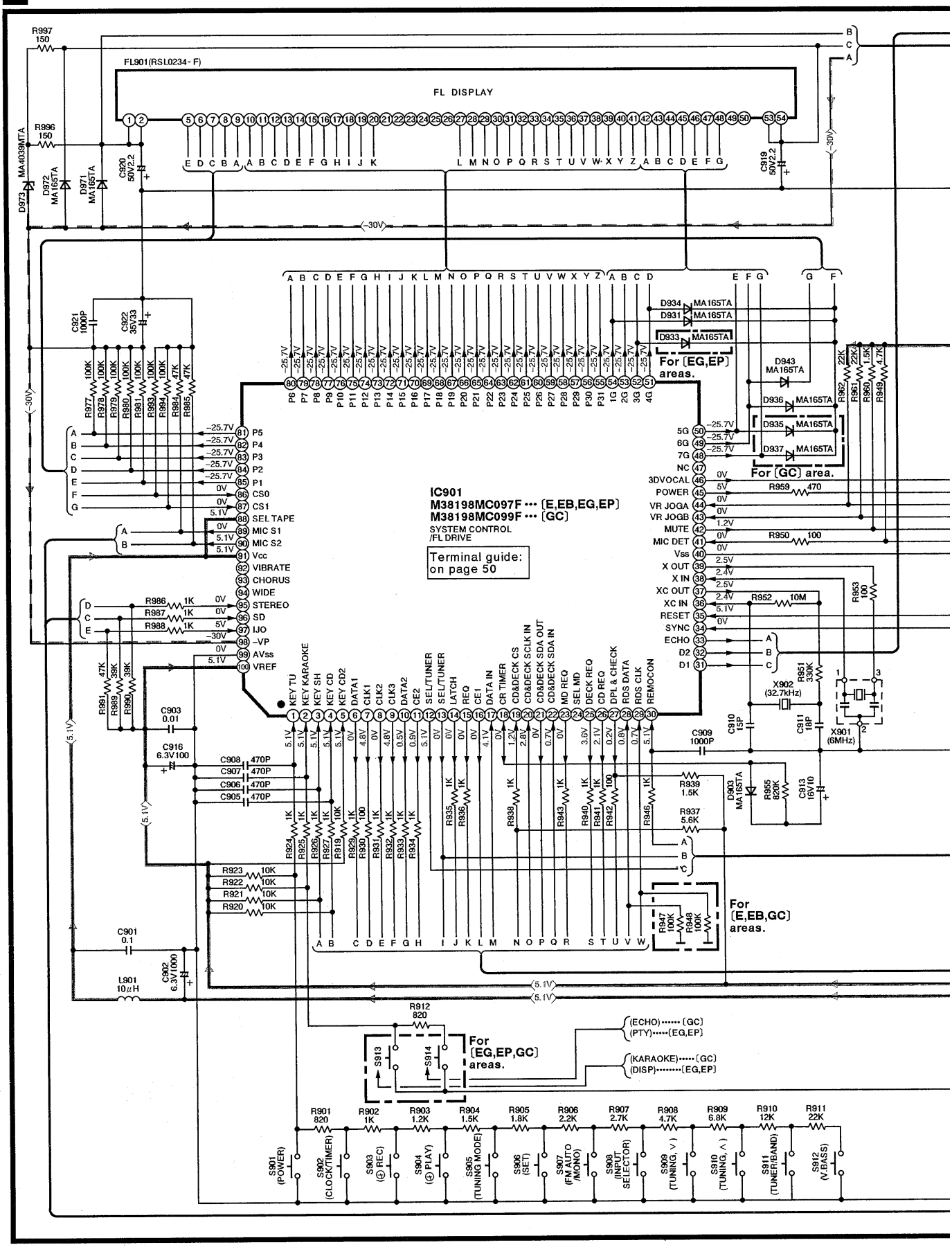
- Important safety notice:
  Components identified by ⚠ mark have special characteristics important for safety.
  Furthermore, special parts which have purposes of fire-retardant (resistors), high-quality sound (capacitors), low-noise (resistors), etc. are used. When replacing any of components, be sure to use only manufacturer's specified parts shown in the parts list.

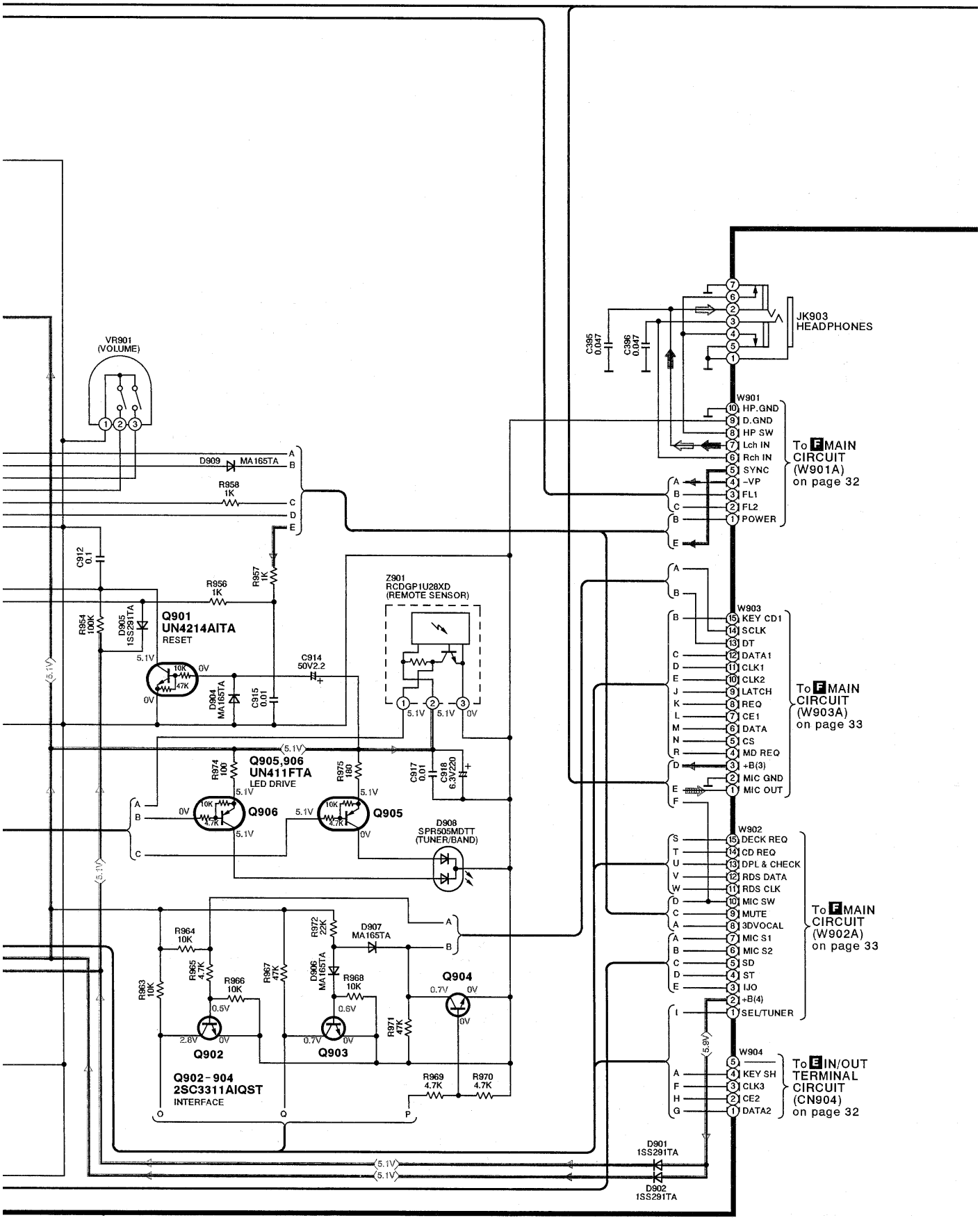
- **Caution!**
  IC and LSI are sensitive to static electricity.
  Secondary trouble can be prevented by taking care during repair.
  Cover the parts boxes made of plastics with aluminum foil.
  Ground the soldering iron.
  Put a conductive mat on the work table.
  Do not touch the legs of IC or LSI with the fingers directly.

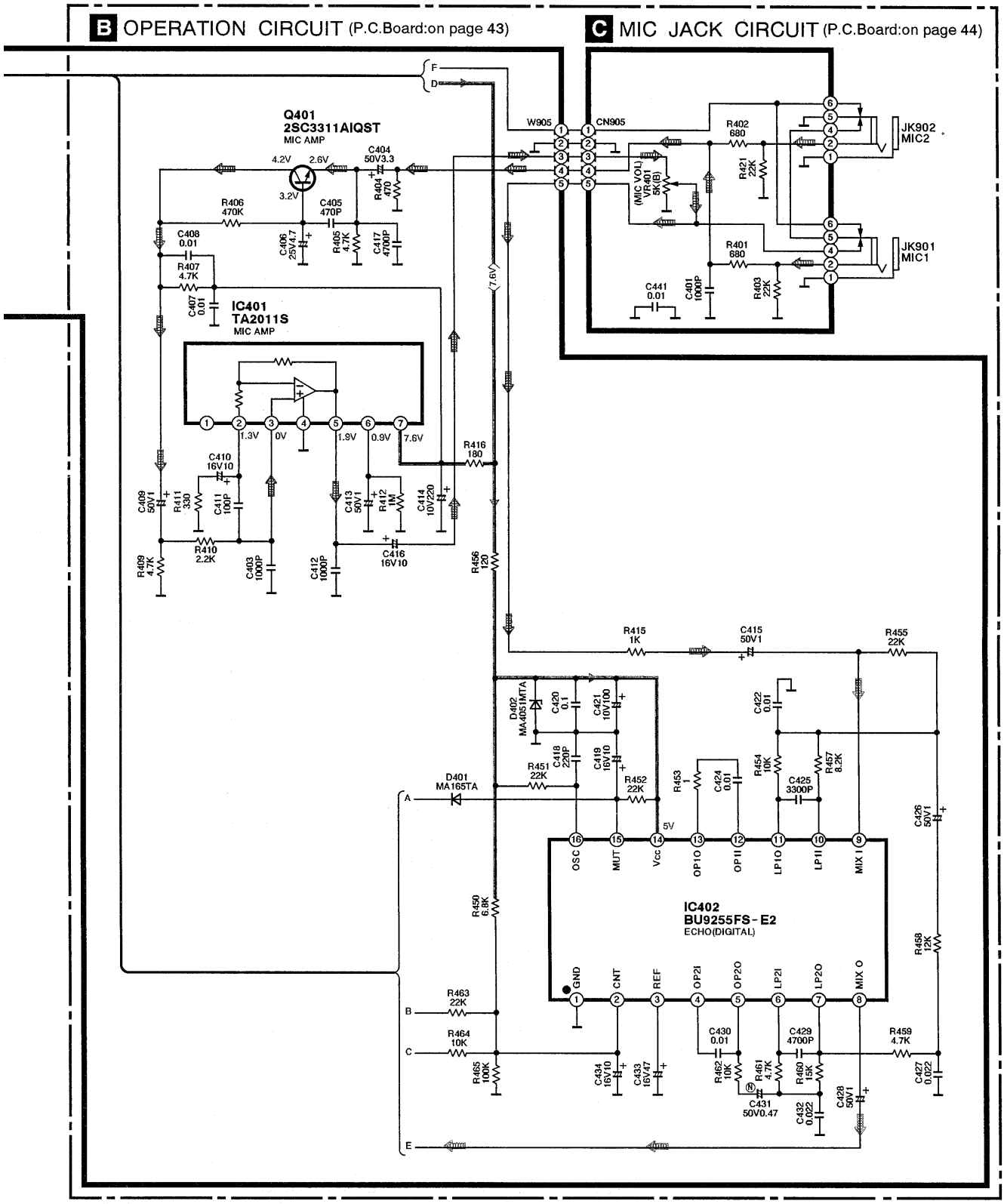
- **Voltage and signal line**

: Positive voltage line
: AM signal Line
: AM OSC signal line
: FM signal line
: FM OSC signal line
:Negative voltage line
:Mic signal Line
:Surround Speaker Drive signal line
:Center Speaker Drive signal line

B OPERATION CIRCUIT (P.C.Board:on page 43)




VR901
(VOLUME)
D909 MA165TA
R958 1K
C912 0.1
R957 1K
R956 1K
R954 100K
D905 1SS291TA
Q901
UN4214AITA
RESET
C914 50V2.2
C915 0.01
D904 MA165TA
Z901
RCDGP1U28XD
(REMOTE SENSOR)
Q905,906
UN411FTA
LED DRIVE
R974 100
R975 180
C917 0.01
C916 6.3V220
Q906
Q905
D908
SPR505MDTT
(TUNER/BAND)
R964 10K
R965 4.7K
R966 10K
R963 10K
R967 47K
R972 22K
D907 MA165TA
D906 MA165TA
R968 10K
Q904
R971 47K
Q902
Q903
Q902-904
2SC3311AIQST
INTERFACE
R969 4.7K
R970 4.7K
C395 0.047
C396 0.047
JK903
HEADPHONES
W901
HP.GND
D.GND
HP SW
Lch IN
Rch IN
SYNC
-VP
FL1
FL2
POWER
To F MAIN CIRCUIT (W901A) on page 32
W903
KEY CD1
SCLK
DT
DATA1
CLK1
CLK2
LATCH
REQ
CE1
DATA
CS
MD REQ
+B(3)
MIC GND
MIC OUT
To F MAIN CIRCUIT (W903A) on page 33
W902
DECK REQ
CD REQ
DPL & CHECK
RDS DATA
RDS CLK
MIC SW
MUTE
3DVOCAL
MIC S1
MIC S2
SD
ST
IJO
+B(4)
SEL/TUNER
To F MAIN CIRCUIT (W902A) on page 33
W904
KEY SH
CLK3
CE2
DATA2
To E IN/OUT TERMINAL CIRCUIT (CN904) on page 32
D901 1SS291TA
D902 1SS291TA



For [GC] area.

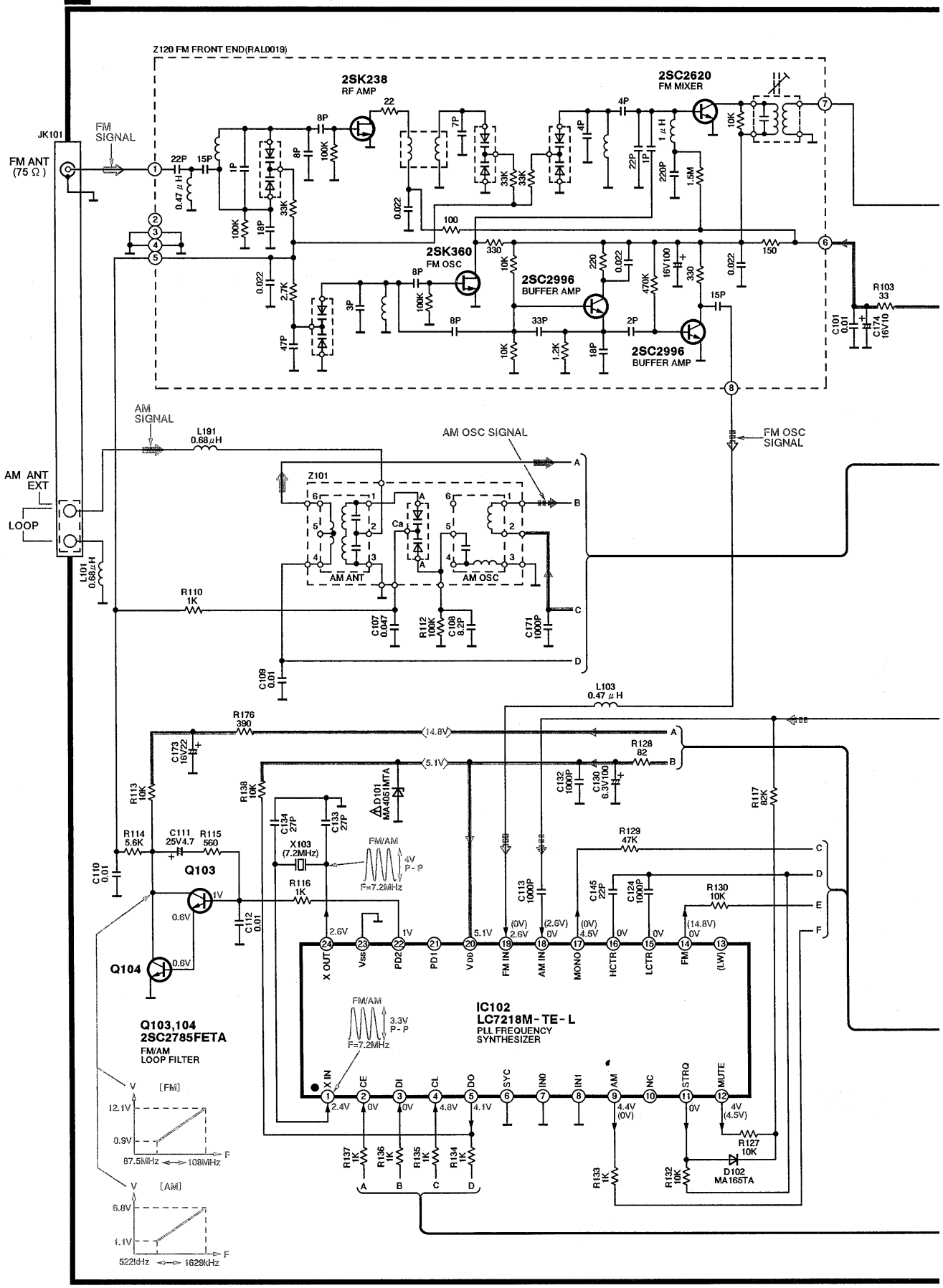
: Positive voltage line

: AM signal Line

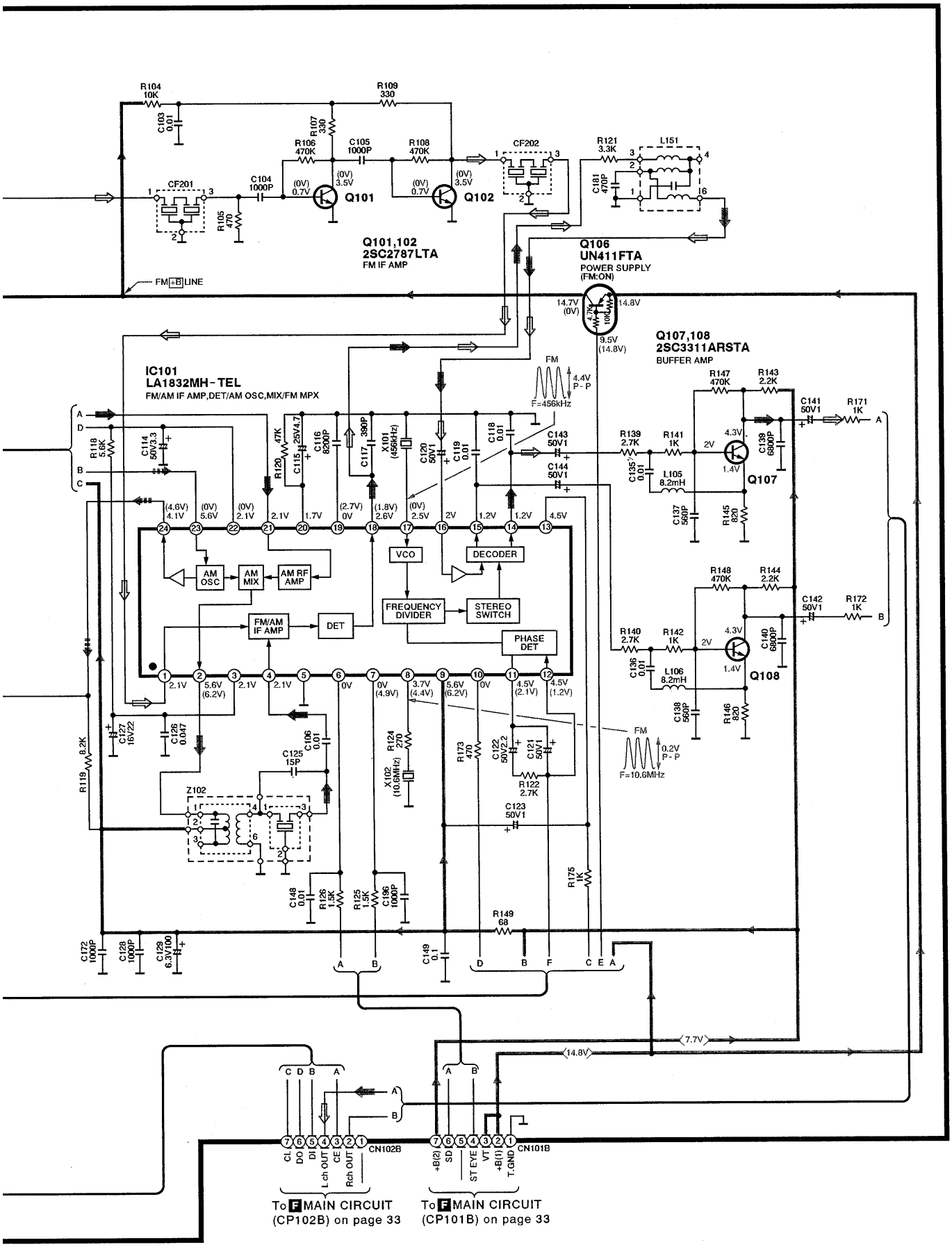
: FM signal line

: Mic signal Line

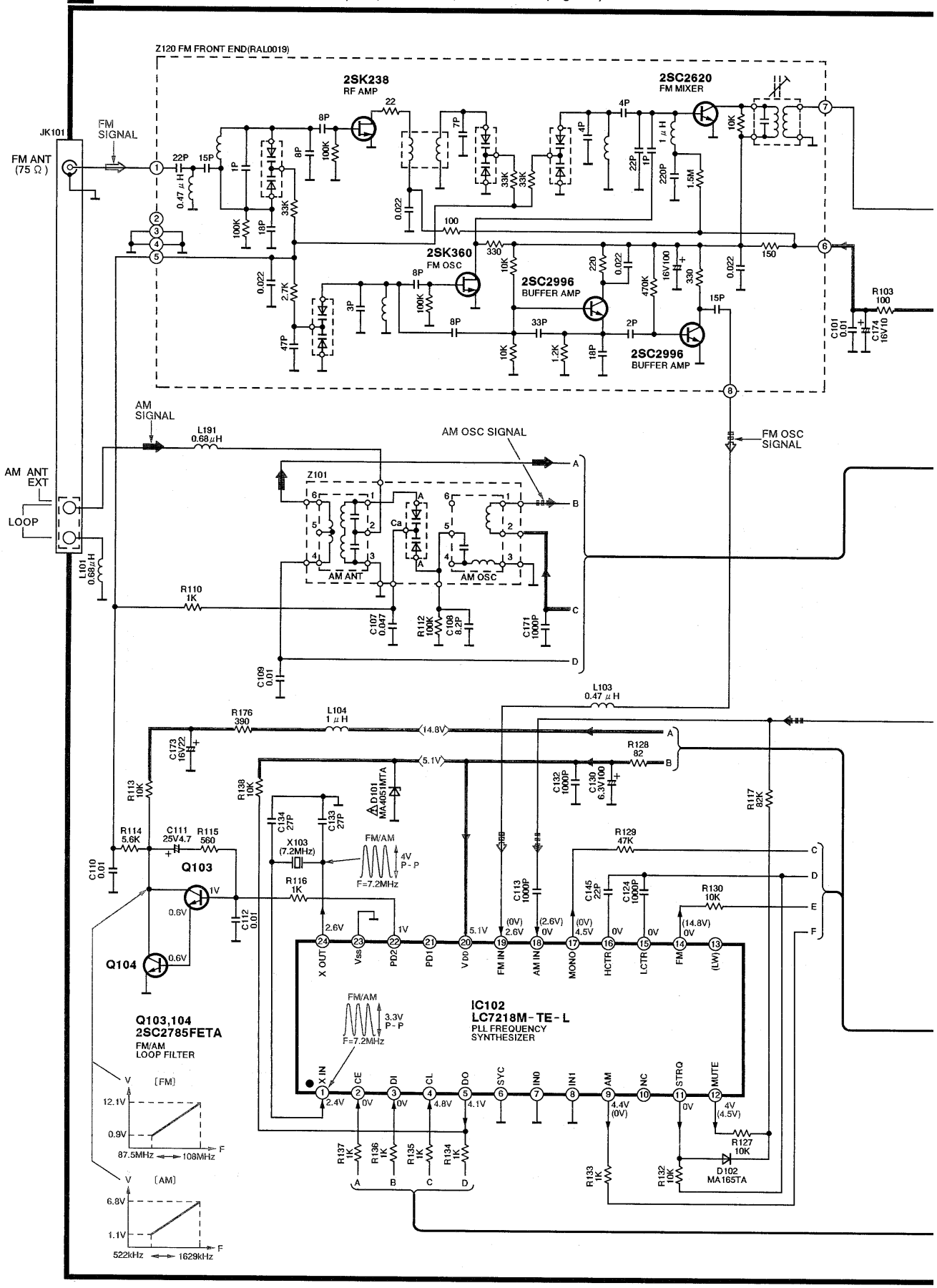
A TUNER CIRCUIT For [E,EB] areas. (P.C.Board:on page 42)



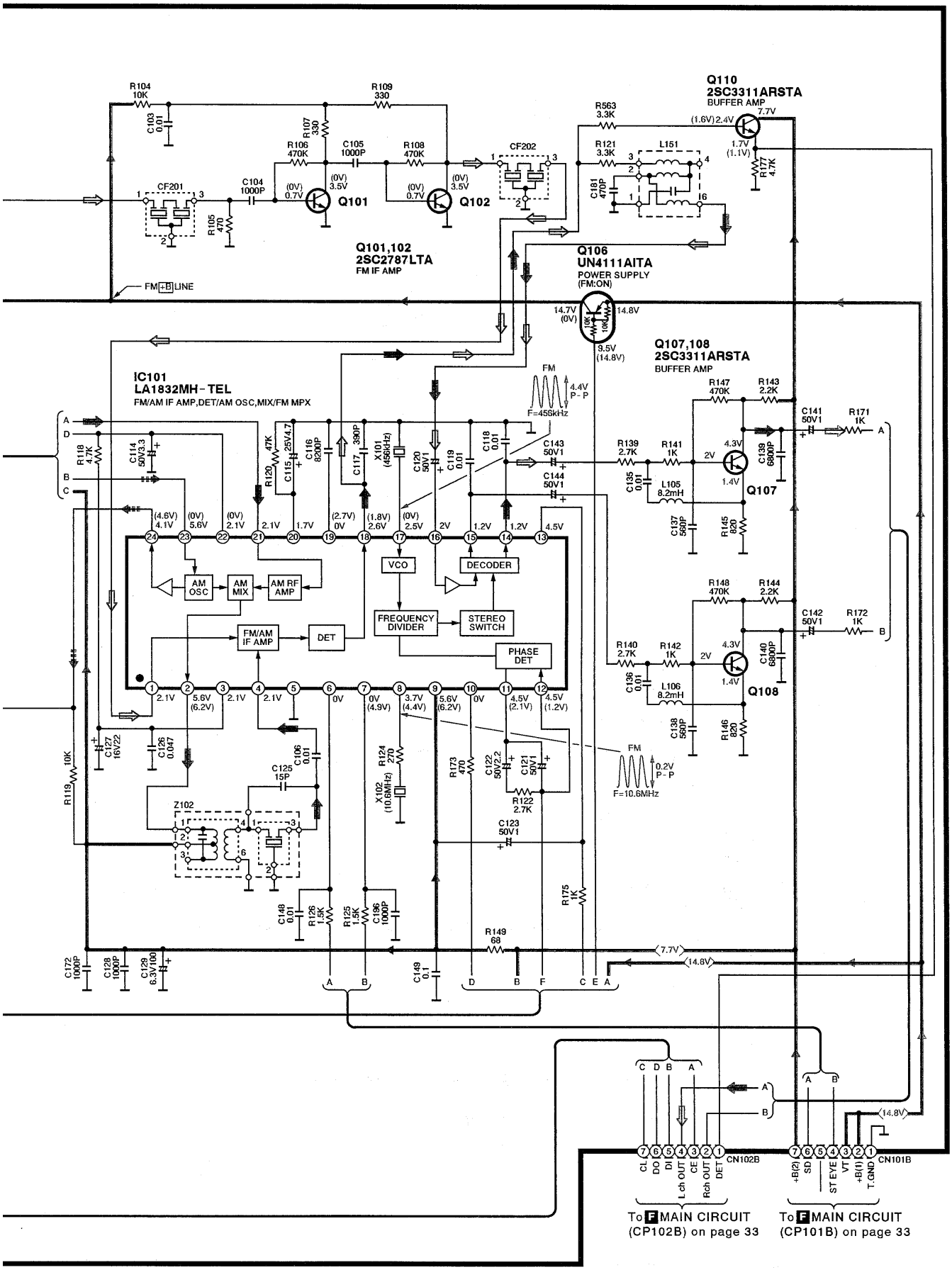
: Positive voltage line
: AM signal Line
: FM signal line
: AM OSC signal line
: FM OSC signal line



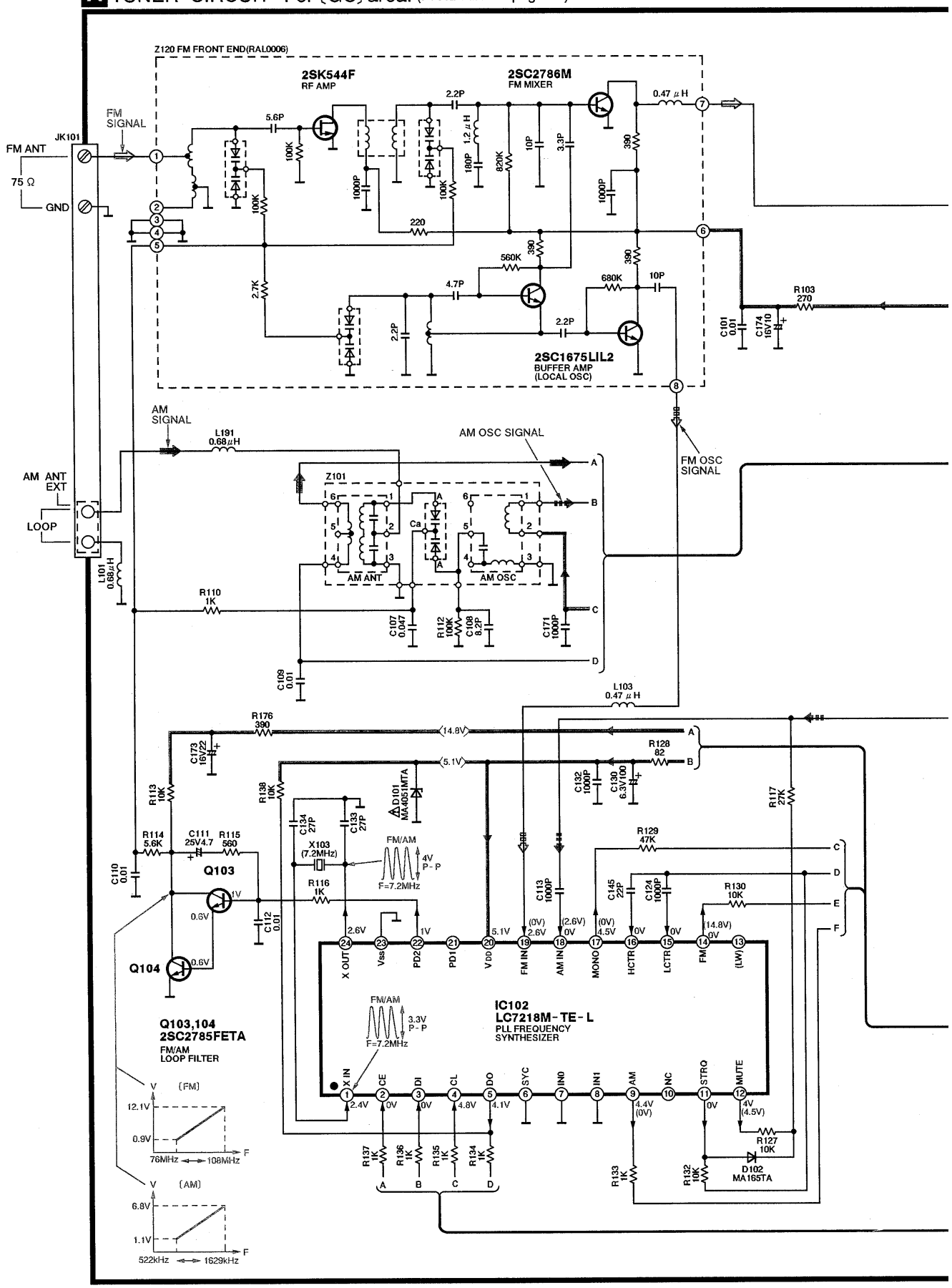
A TUNER CIRCUIT For [EG,EP] areas. (P.C.Board:on page 42)



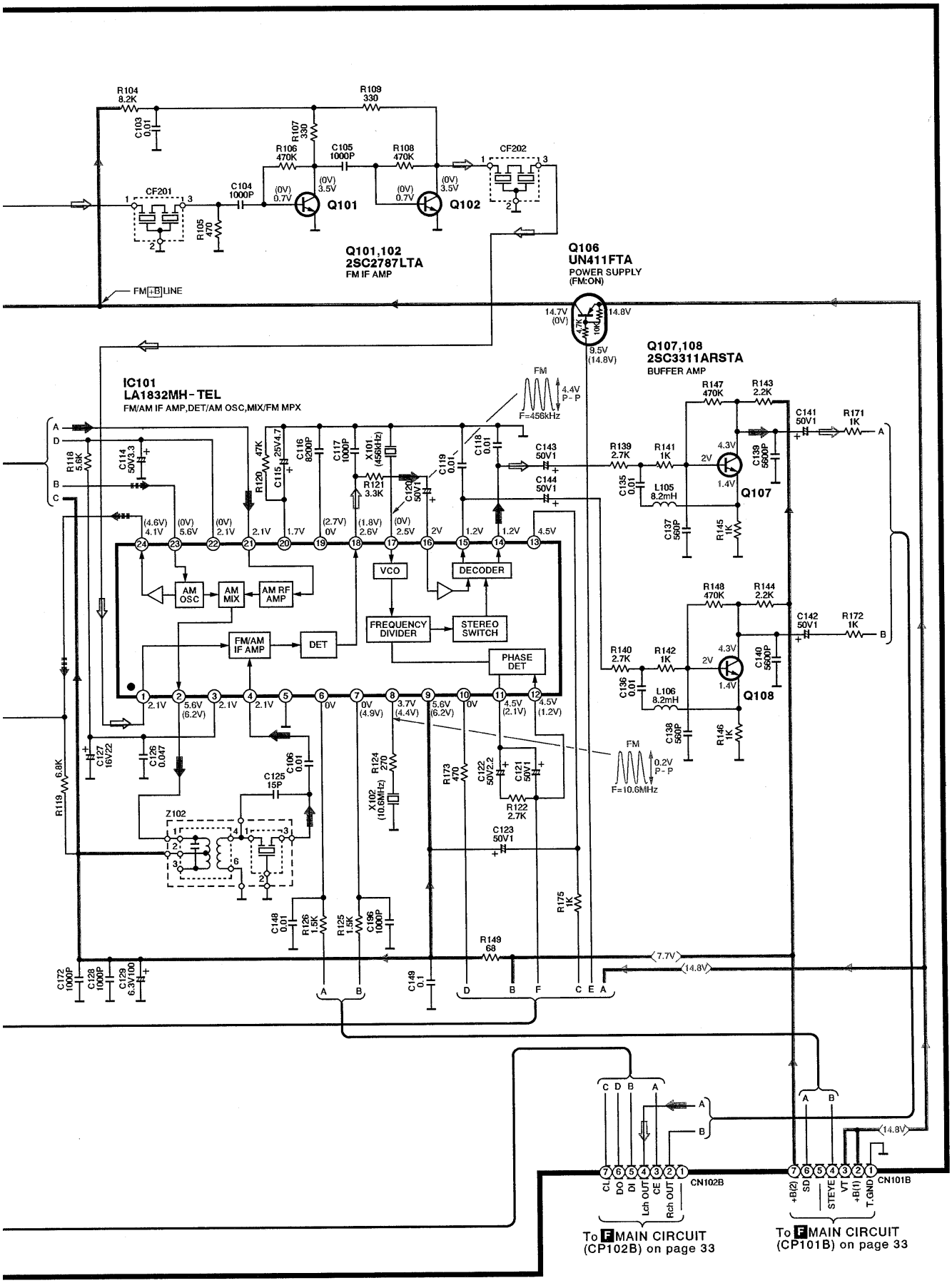
: Positive voltage line
: AM OSC signal line
: AM signal Line
: FM OSC signal line
: FM signal line



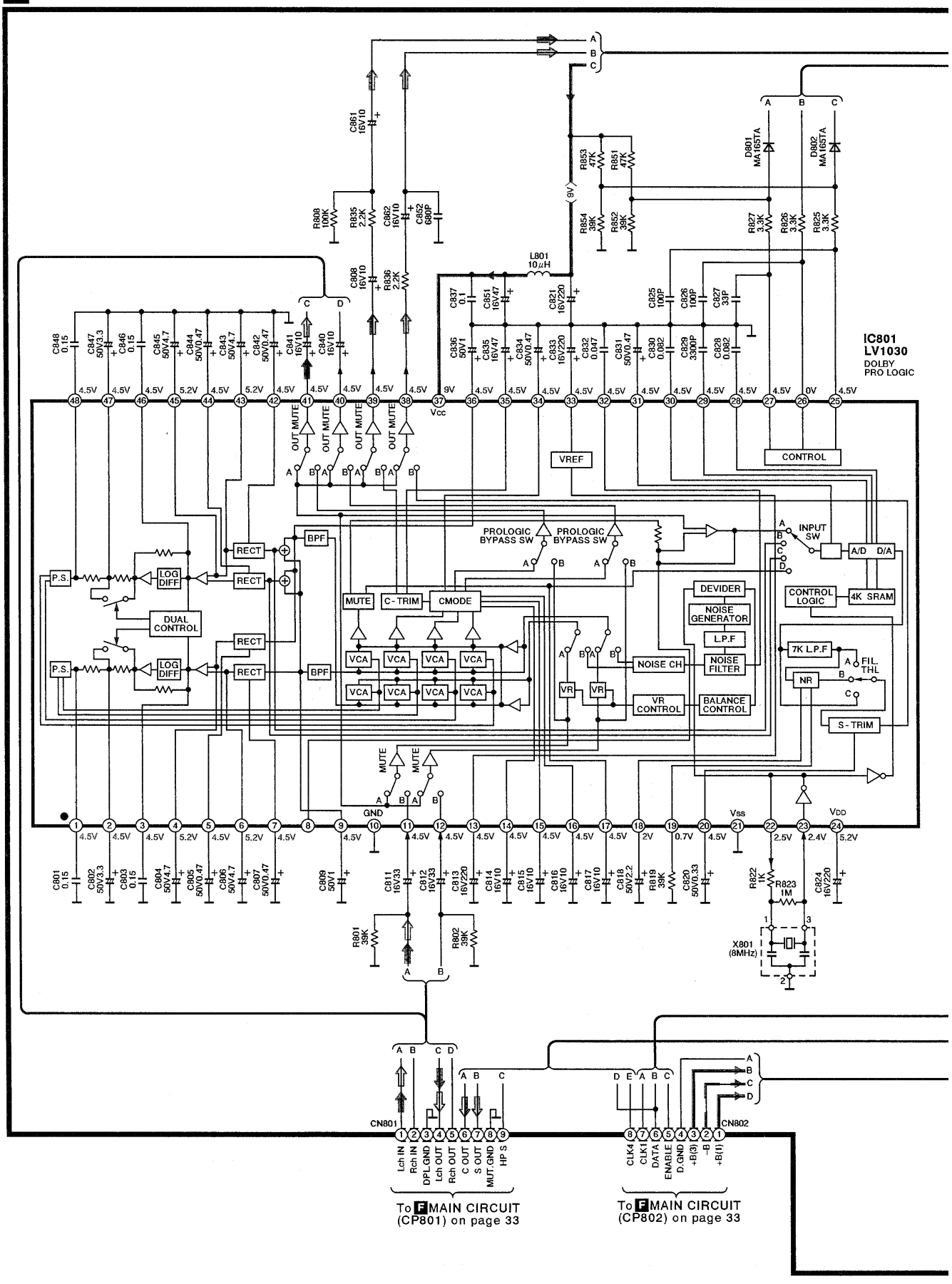
A TUNER CIRCUIT For [GC] area. (P.C.Board:on page 43)



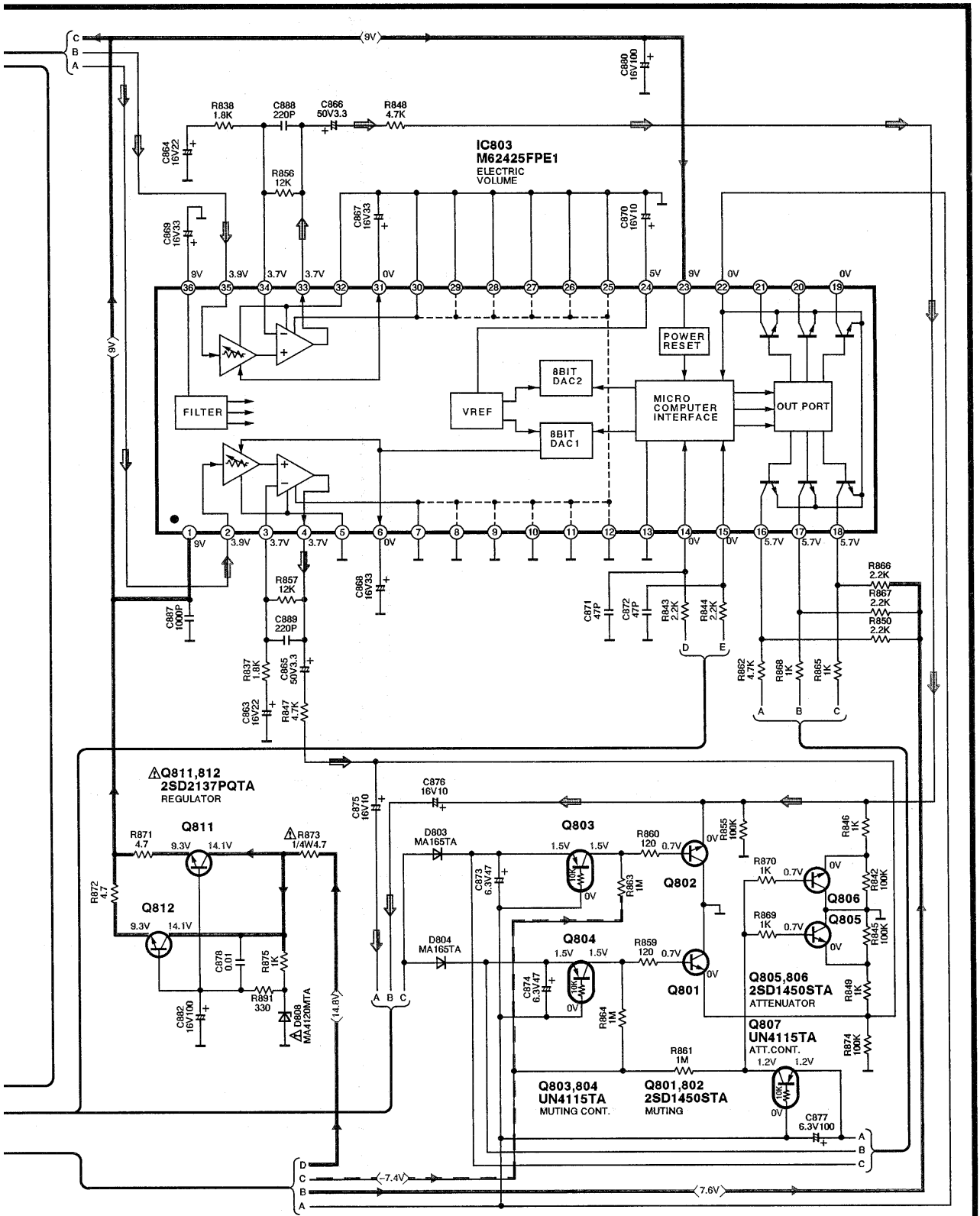
: Positive voltage line
: AM signal Line
: FM signal line
: AM OSC signal line
: FM OSC signal line



D DOLBY PROLOGIC CIRCUIT For[GC]area. (P.C.Board:on page 44)



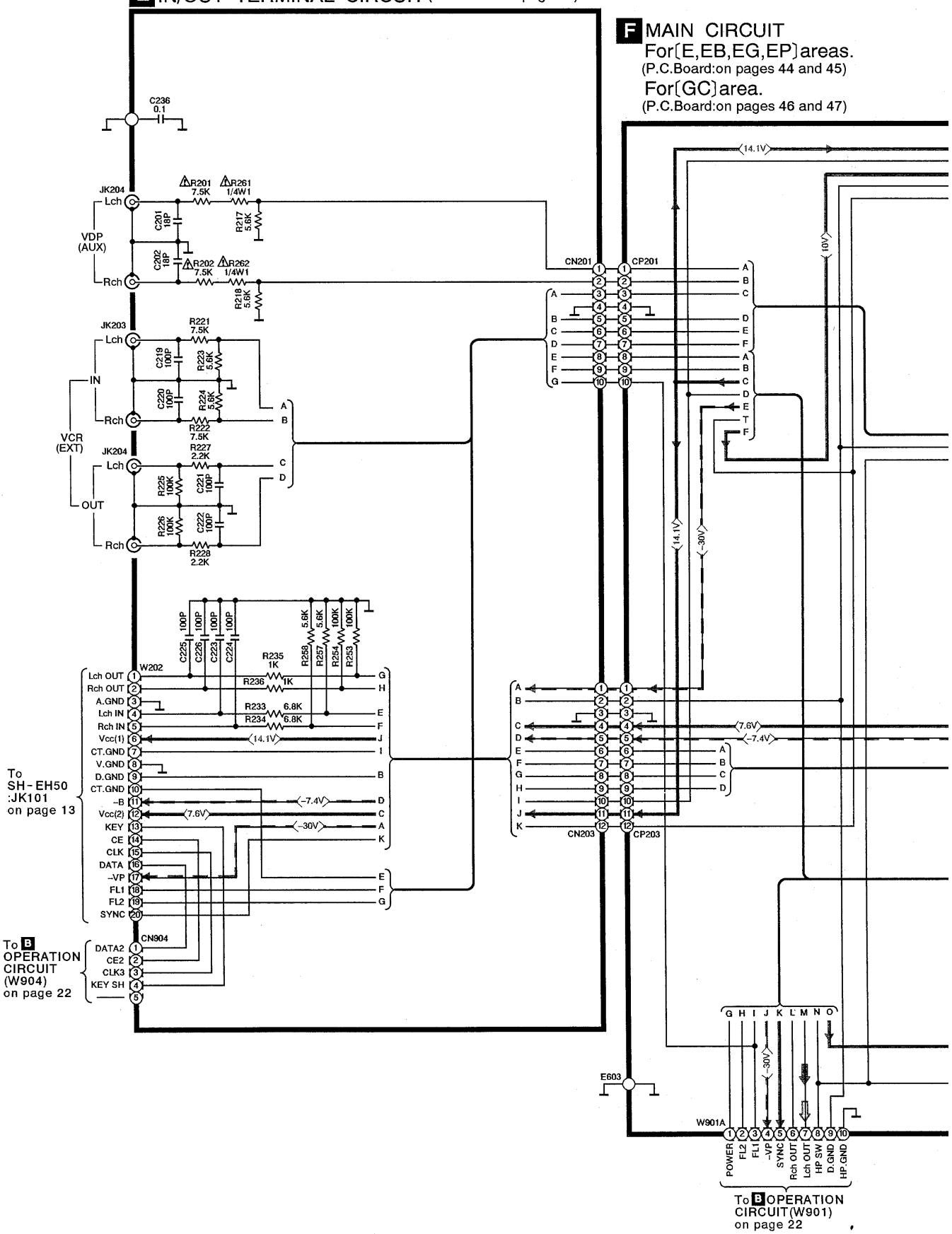
: Positive voltage line
: Negative voltage line
: AM signal Line
: FM signal line
: FM OSC signal line
: Surround Speaker Drive signal line
: Center Speaker Drive signal line



: Positive voltage line
: Negative voltage line
: AM signal Line
: FM signal line

E IN/OUT TERMINAL CIRCUIT (P.C.Board:on page 44)

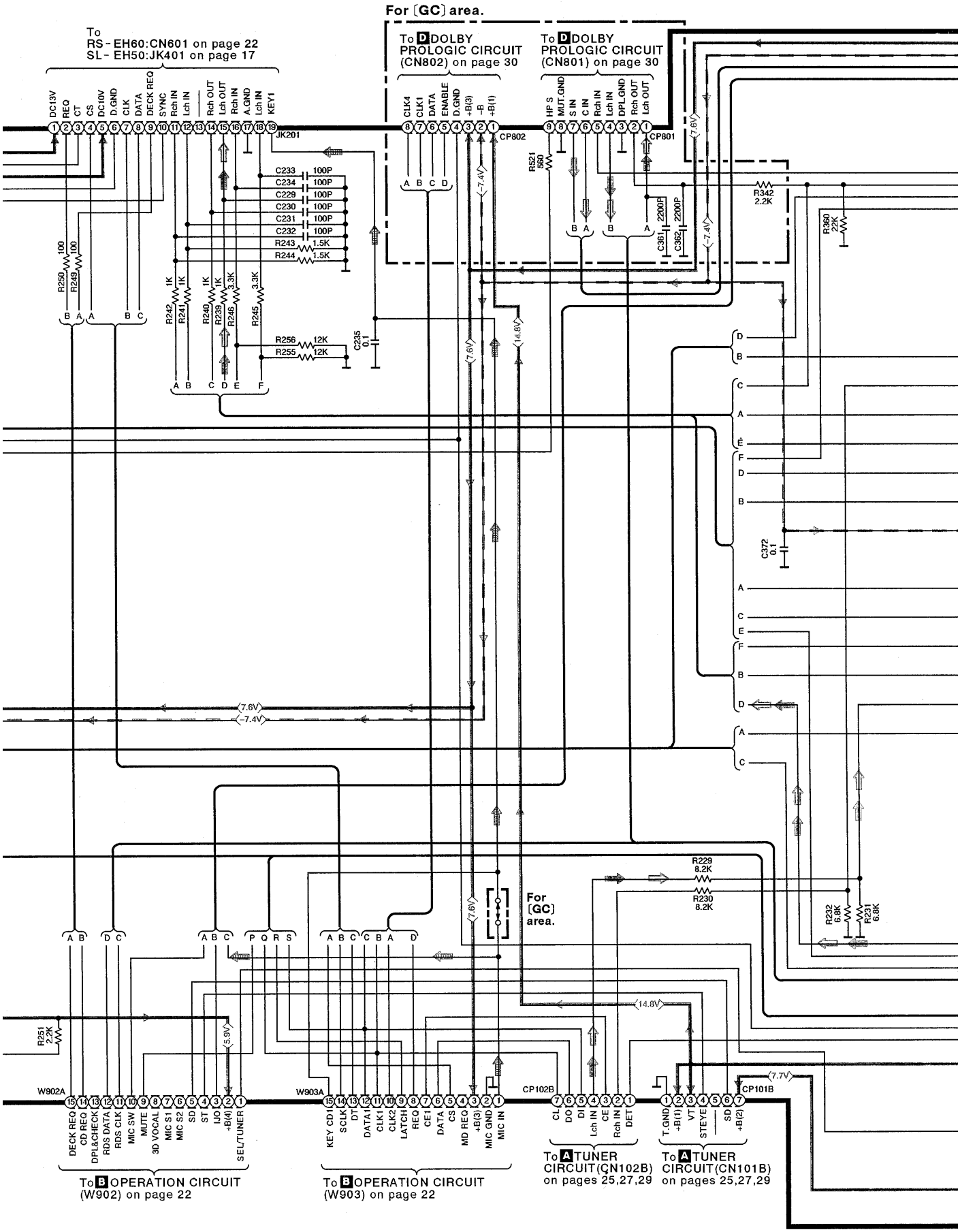
F MAIN CIRCUIT
For[E,EB,EG,EP]areas.
(P.C.Board:on pages 44 and 45)
For[GC]area.
(P.C.Board:on pages 46 and 47)



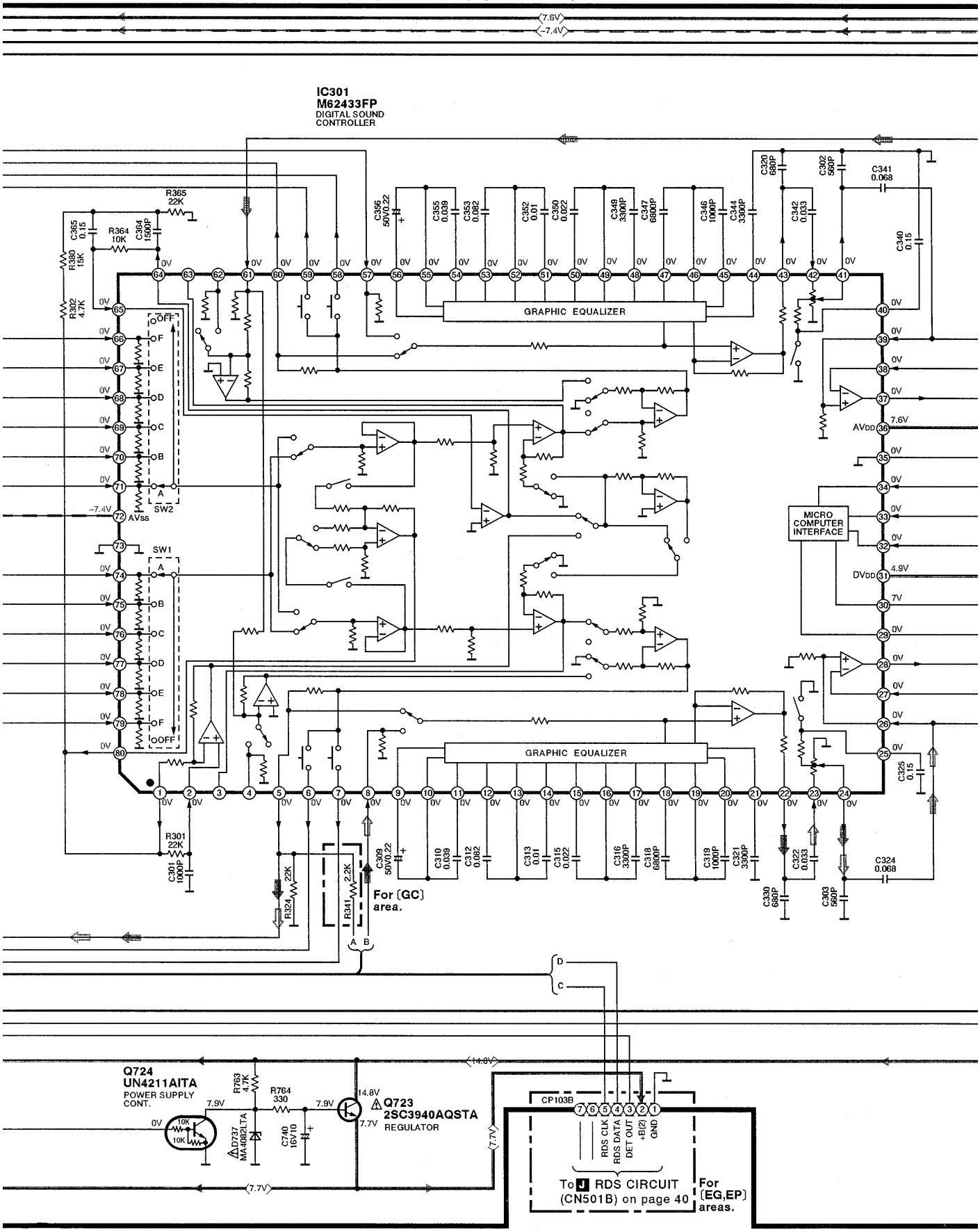
: Surround Speaker Drive signal line

: Center Speaker Drive signal line

: Mic signal Line

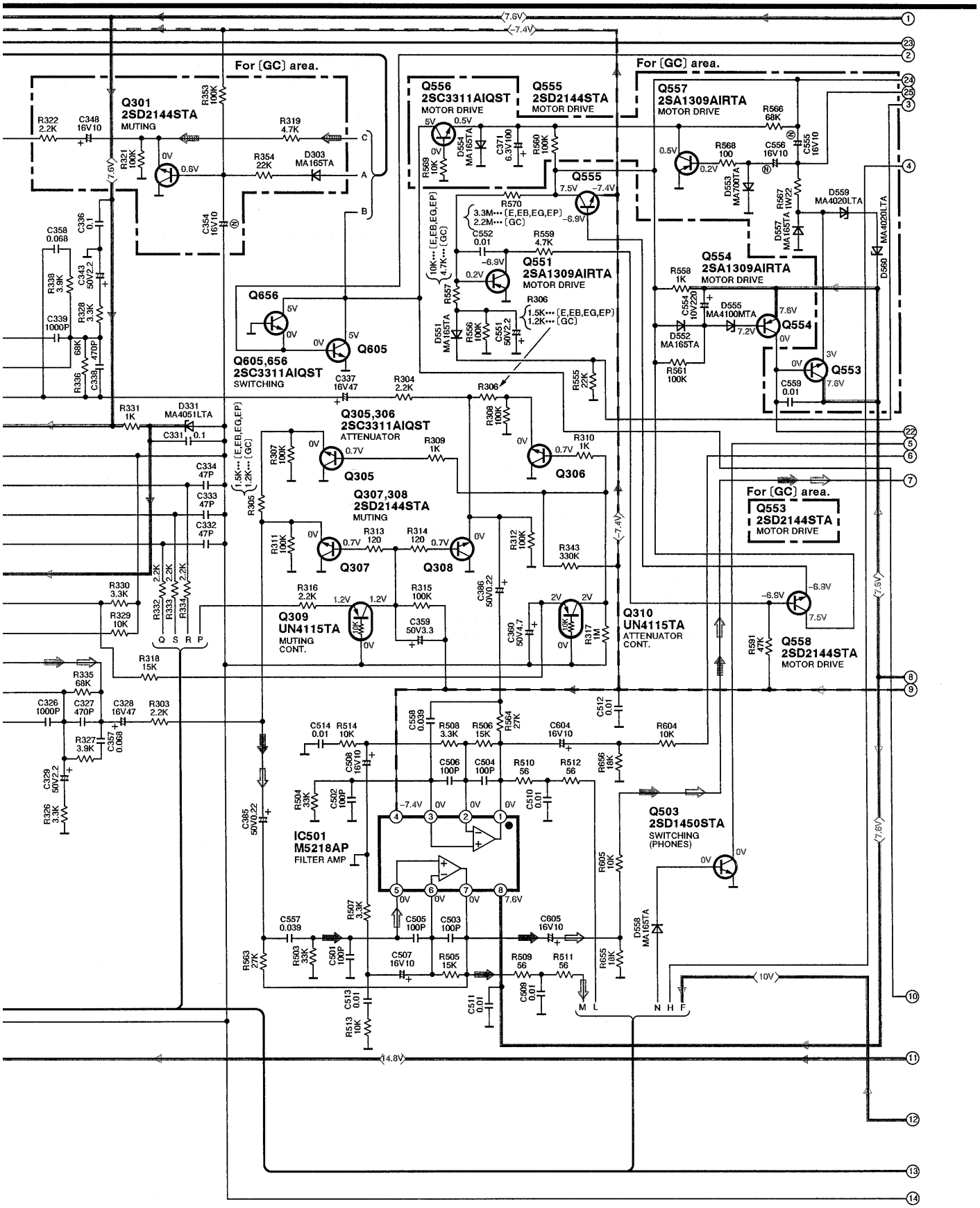


F MAIN CIRCUIT For [E,EB,EG,EP] areas. (P.C.Board:on pages 44 and 45)
For [GC] area. (P.C.Board:on pages 46 and 47)



: Positive voltage line : Negative voltage line

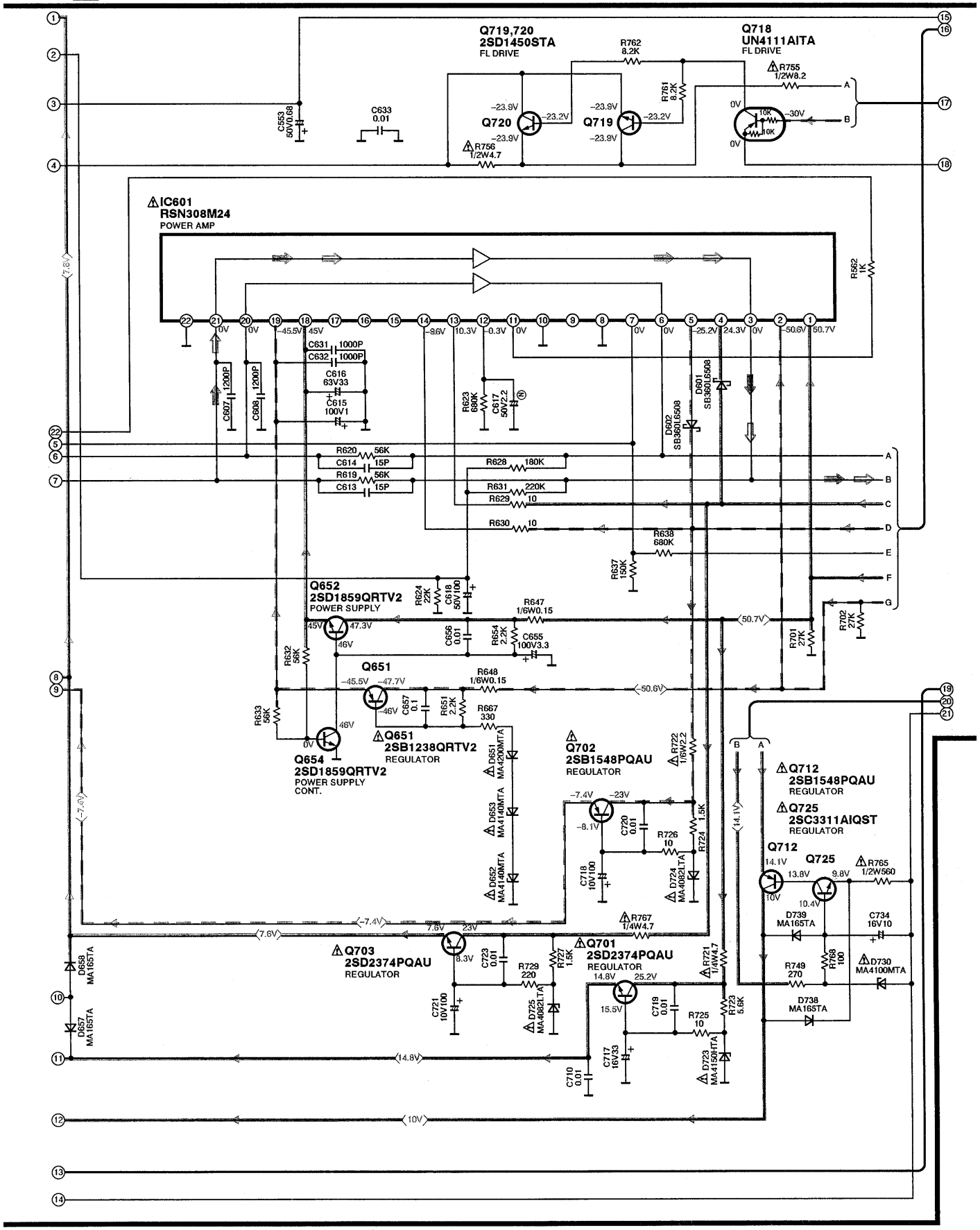
: AM signal Line : FM signal line : Mic signal Line



: Positive voltage line　　: Negative voltage line

: AM signal Line　　: FM signal line

F MAIN CIRCUIT For [E,EB,EG,EP] areas. (P.C.Board:on pages 44 and 45)

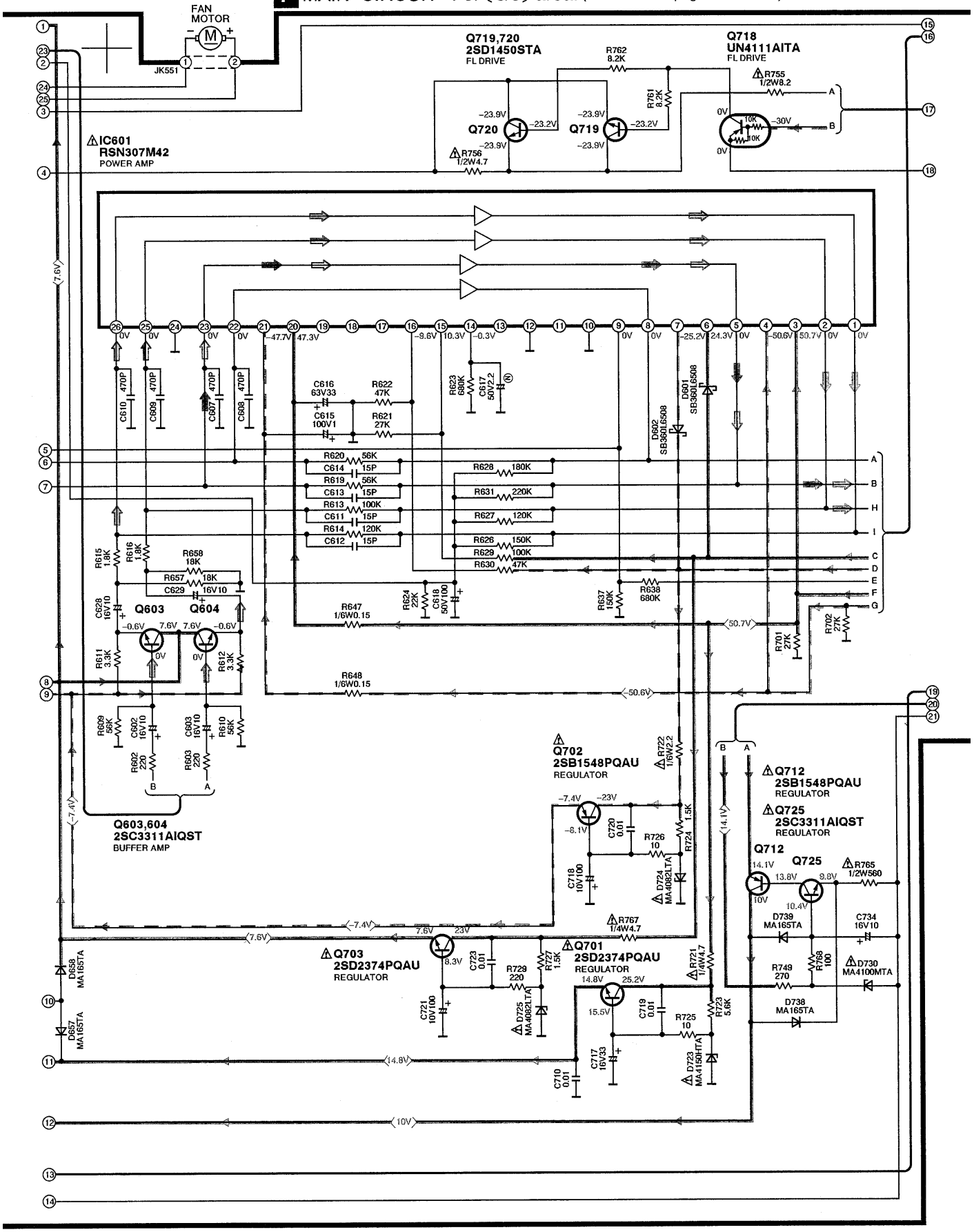


: Surround Speaker Drive signal line

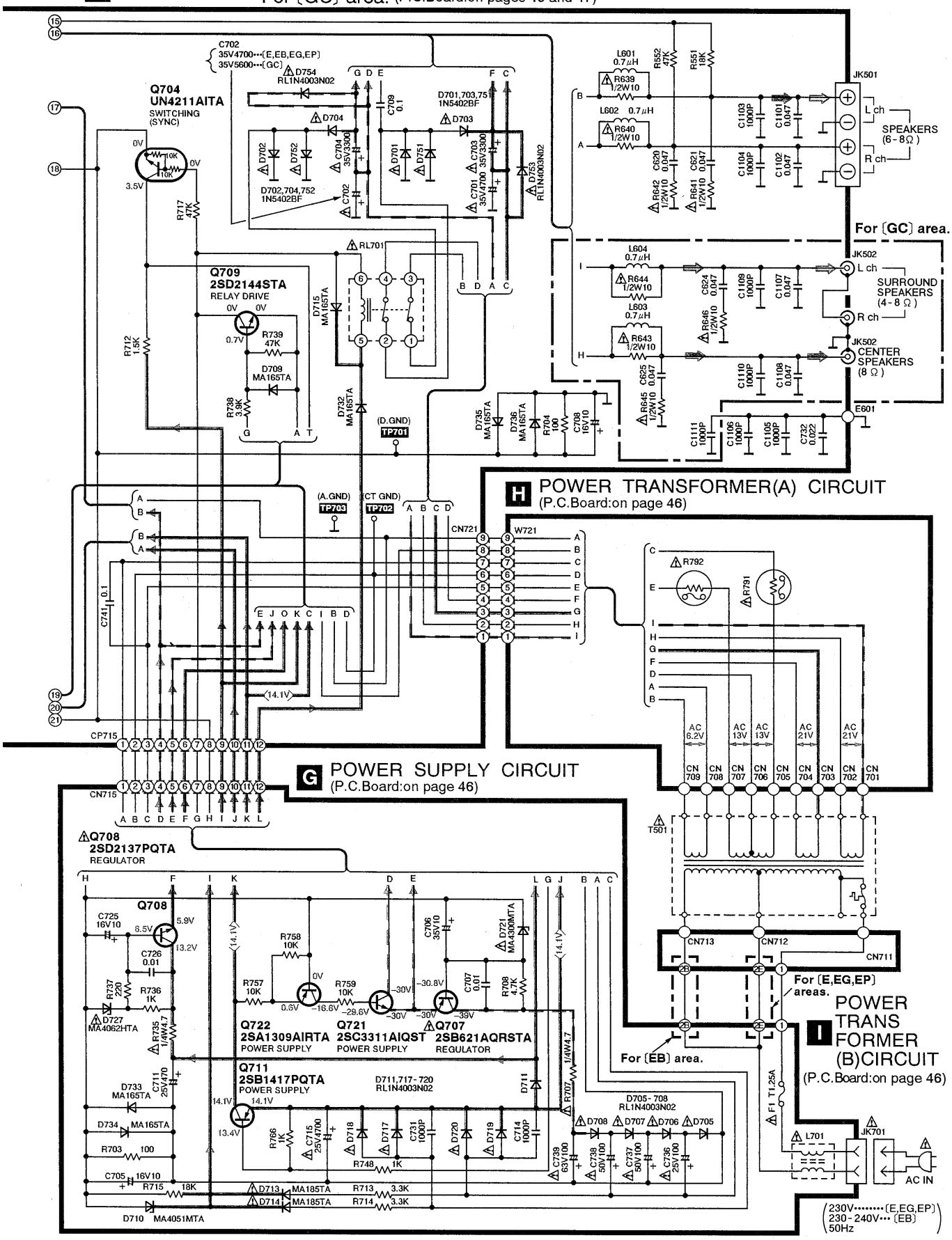
: Center Speaker Drive signal line

: Mic signal Line

F MAIN CIRCUIT For [GC] area. (P.C.Board:on pages 46 and 47)



F MAIN CIRCUIT For [E,EB,EG,EP] areas. (P.C.Board:on pages 44 and 45) For [GC] area. (P.C.Board:on pages 46 and 47)

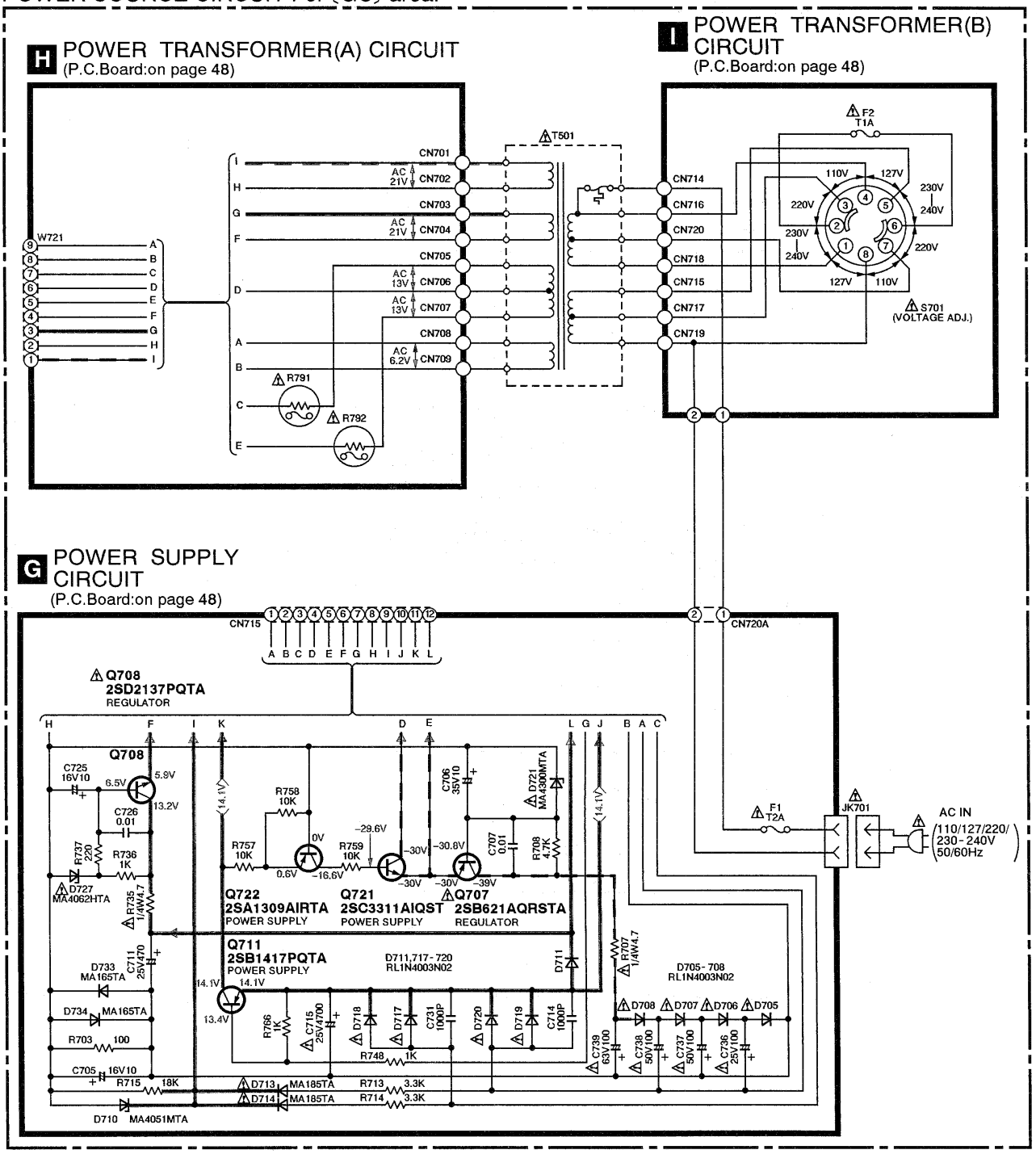


H POWER TRANSFORMER(A) CIRCUIT (P.C.Board:on page 46)

G POWER SUPPLY CIRCUIT (P.C.Board:on page 46)

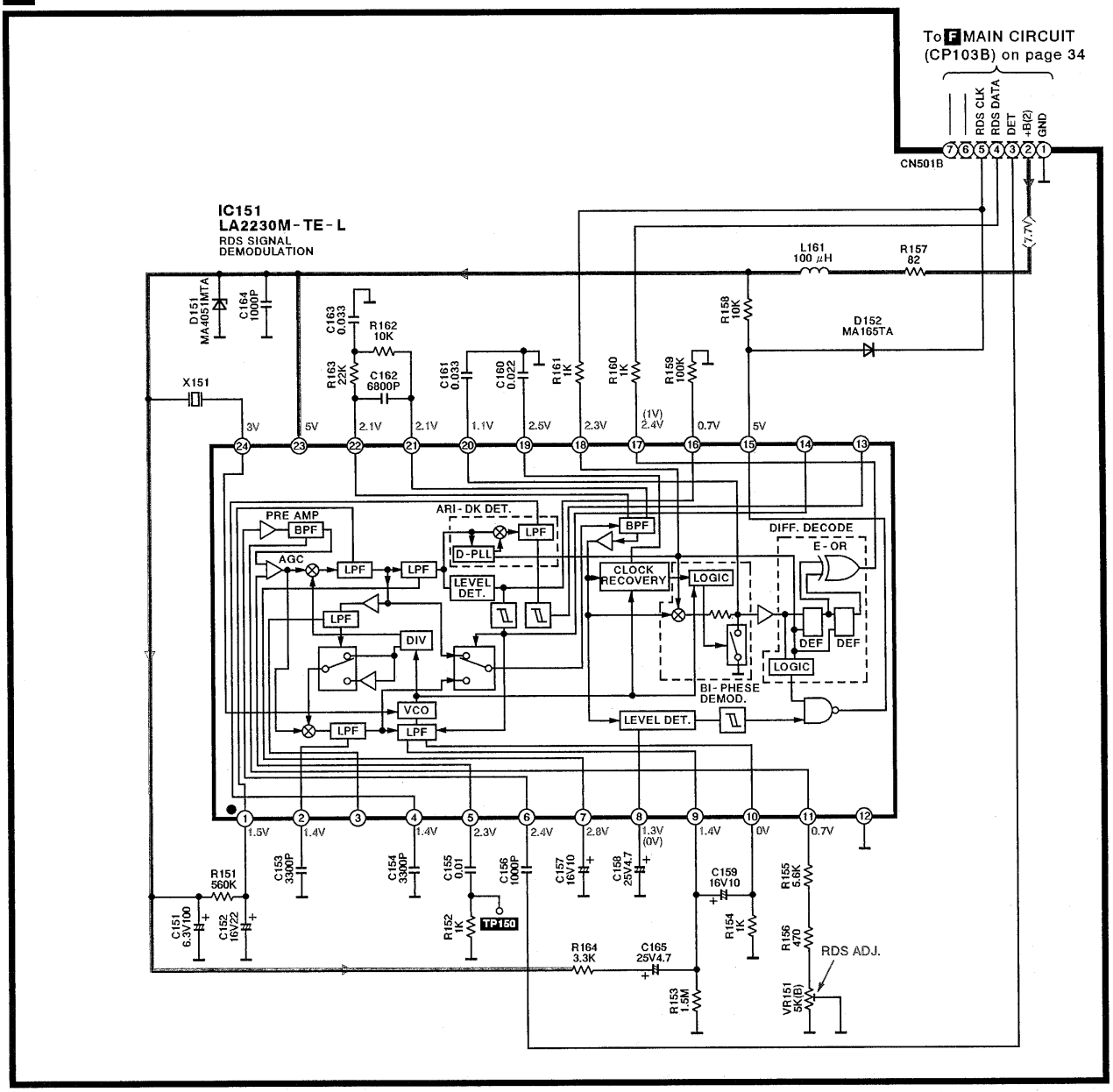
I POWER TRANS FORMER (B)CIRCUIT (P.C.Board:on page 46)

POWER SOURCE CIRCUIT For [GC] area.



: Positive voltage line
: Negative voltage line
: AM signal Line
: FM signal line
: Surround Speaker Drive signal line
: Center Speaker Drive signal line
: Mic signal Line

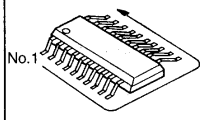
J RDS CIRCUIT For [EG,EP] areas. (P.C.Board:on page 46)



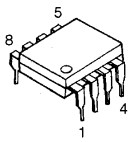
: Positive voltage line

■ Type Illustration of IC's, Transistors and Diodes

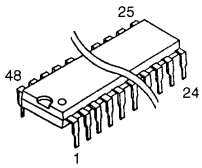
BU9255FS-E2	16PIN
LA1832MH-TEL	24PIN
LA2230M-TE-L	24PIN
LC7218M-TE-L	24PIN
M62425FPE1	36PIN



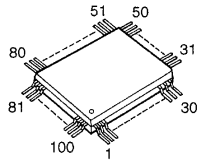
M5218AP



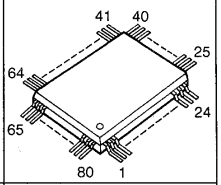
LV1030



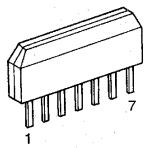
M38198MC097F
M38198MC099F



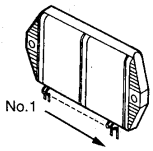
M62433FP

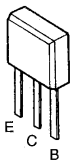


TA2011S



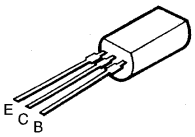
RSN308M24	22PIN
RSN307M42	26PIN



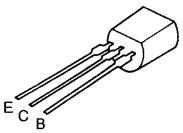


2SA1309AIRTA
2SC2787LTA
2SC2785FETA
2SC3311AIQST
2SC3311ARSTA
2SD1450STA
UN411FTA
UN4111AITA
UN4115TA
UN4211AITA
UN4214AITA

2SC3940AQSTA



2SB621AQRSTA



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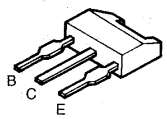
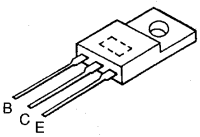
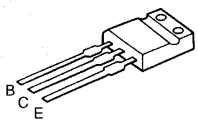
2SD1859QRTV2



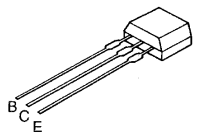
2SB1548PQAU
2SD2374PQAU

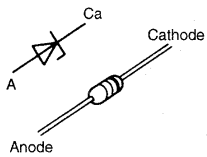


2SB1417PQTA
2SD2137PQTA

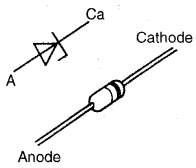


2SD2144STA



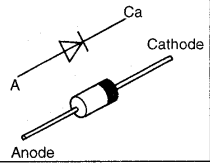


MA4020LTA
MA4039MTA
MA4051LTA
MA4051MTA
MA4062HTA
MA4082LTA

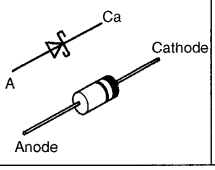


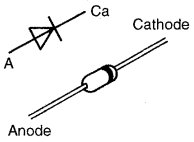
MA4100MTA
MA4120MTA
MA4140MTA
MA4150HTA
MA4200MTA
MA4300MTA

1N5402BF
RL1N4003N02



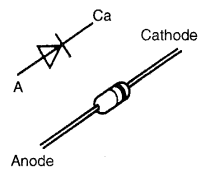
SB360L6508



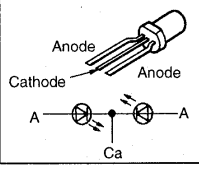


MA165TA
MA700TA
1SS291TA

MA185TA



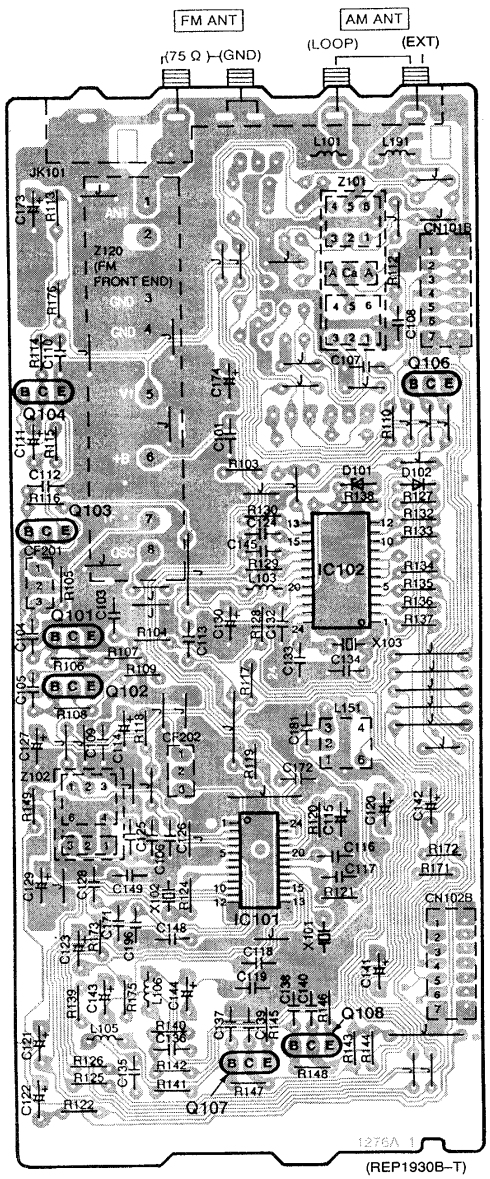
SPR505MDTT



■ Printed Circuit Board Diagram

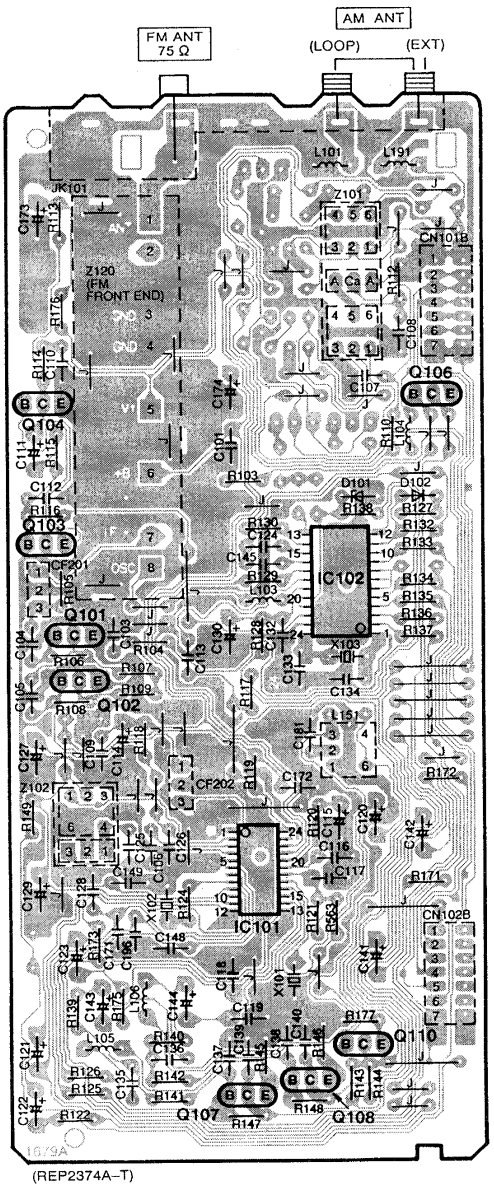
- This circuit board diagram may be modified at any time with the development of new technology.

A **TUNER P.C.B. For [E,EB] areas.**



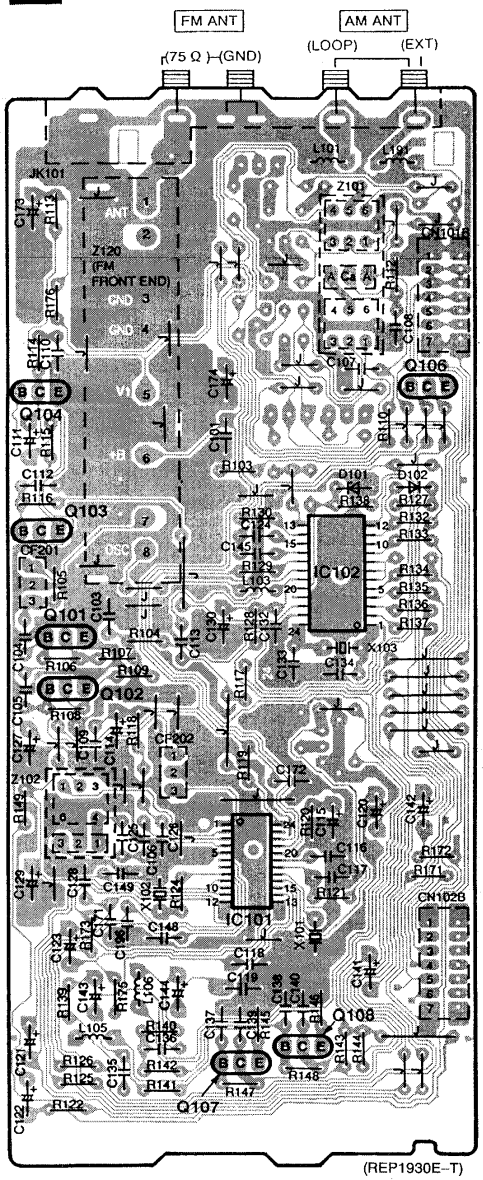
(REP1930B–T)

A **TUNER P.C.B. For [EG,EP] areas.**

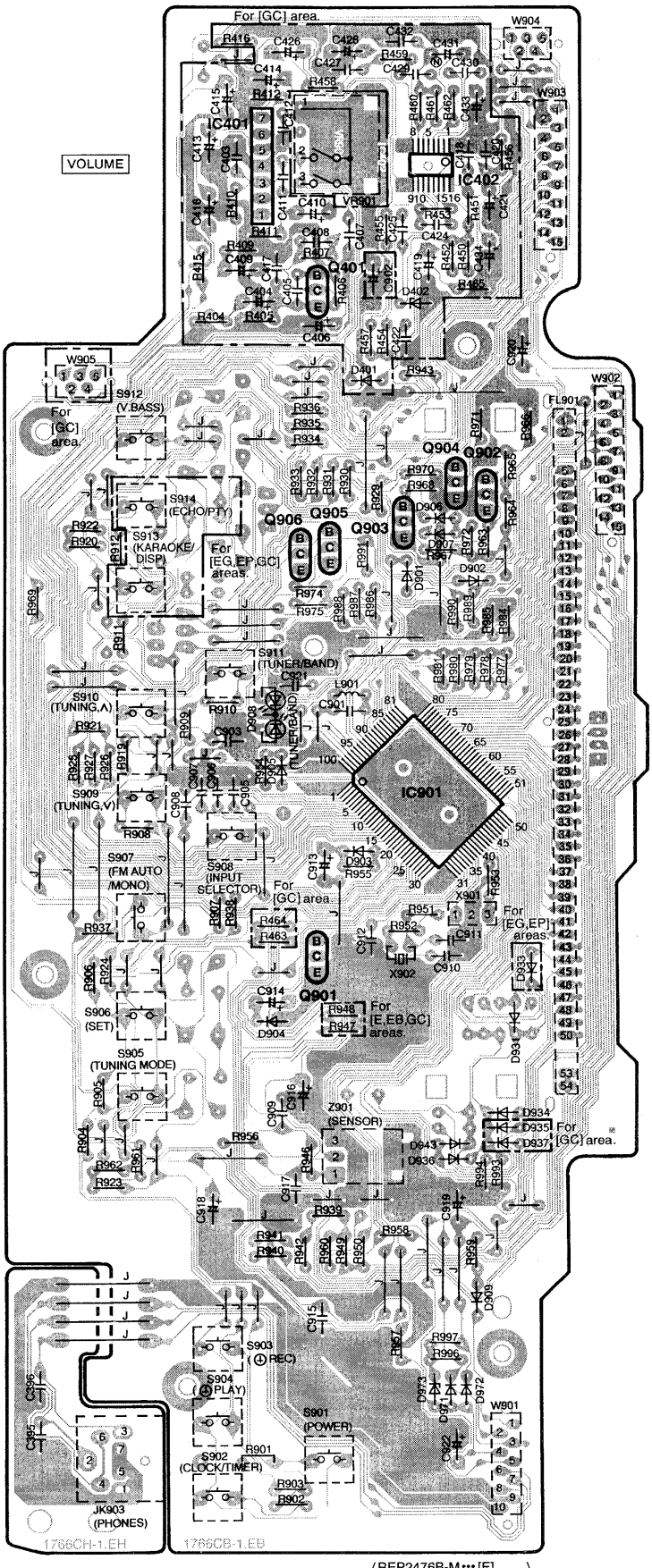


(REP2374A–T)

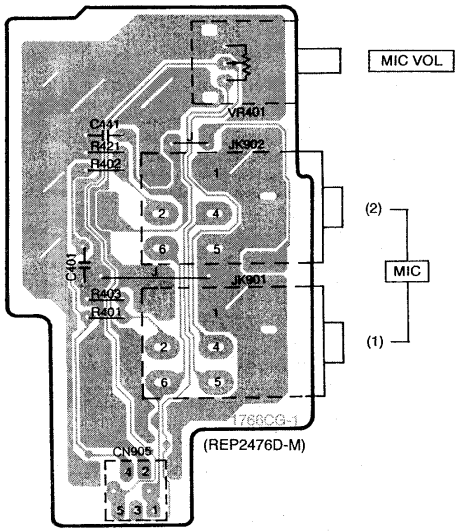
A TUNER P.C.B. For [GC] area.



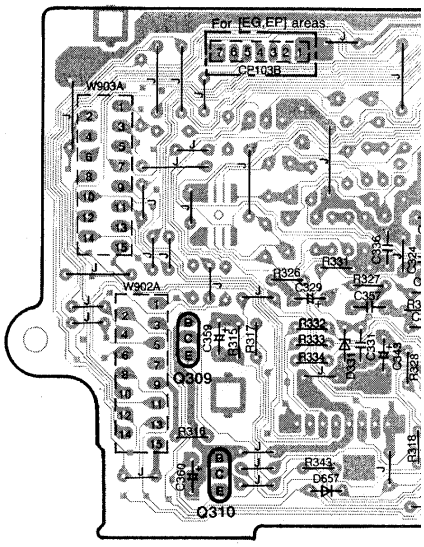
B OPERATION P.C.B.



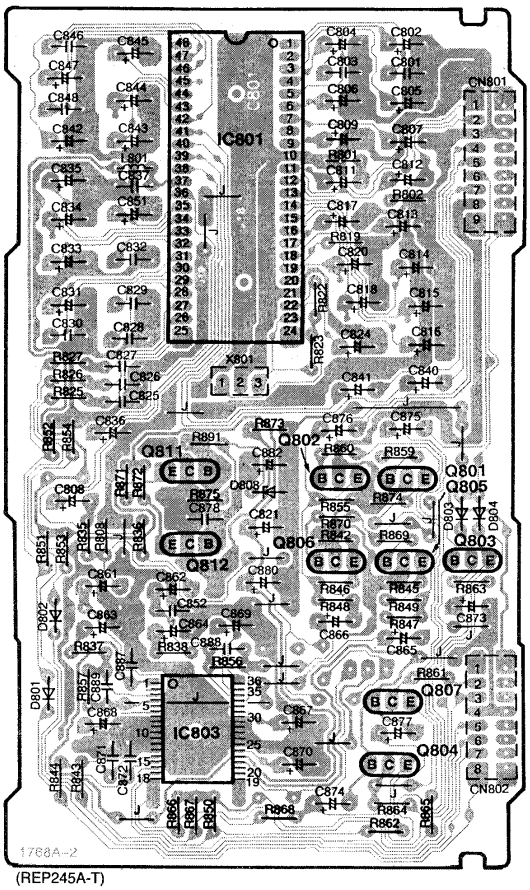
C MIC JACK P.C.B. For [GC] area.



F MAIN P.C.B. For [E,EB,EG,EP

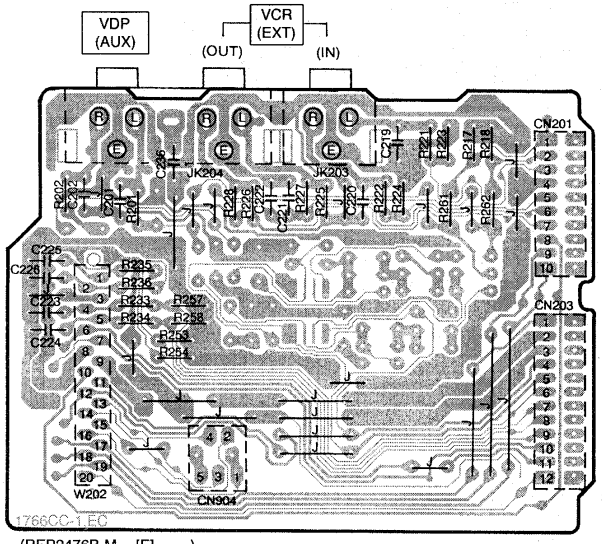


D DOLBY PROLOGIC P.C.B. For [GC] area.

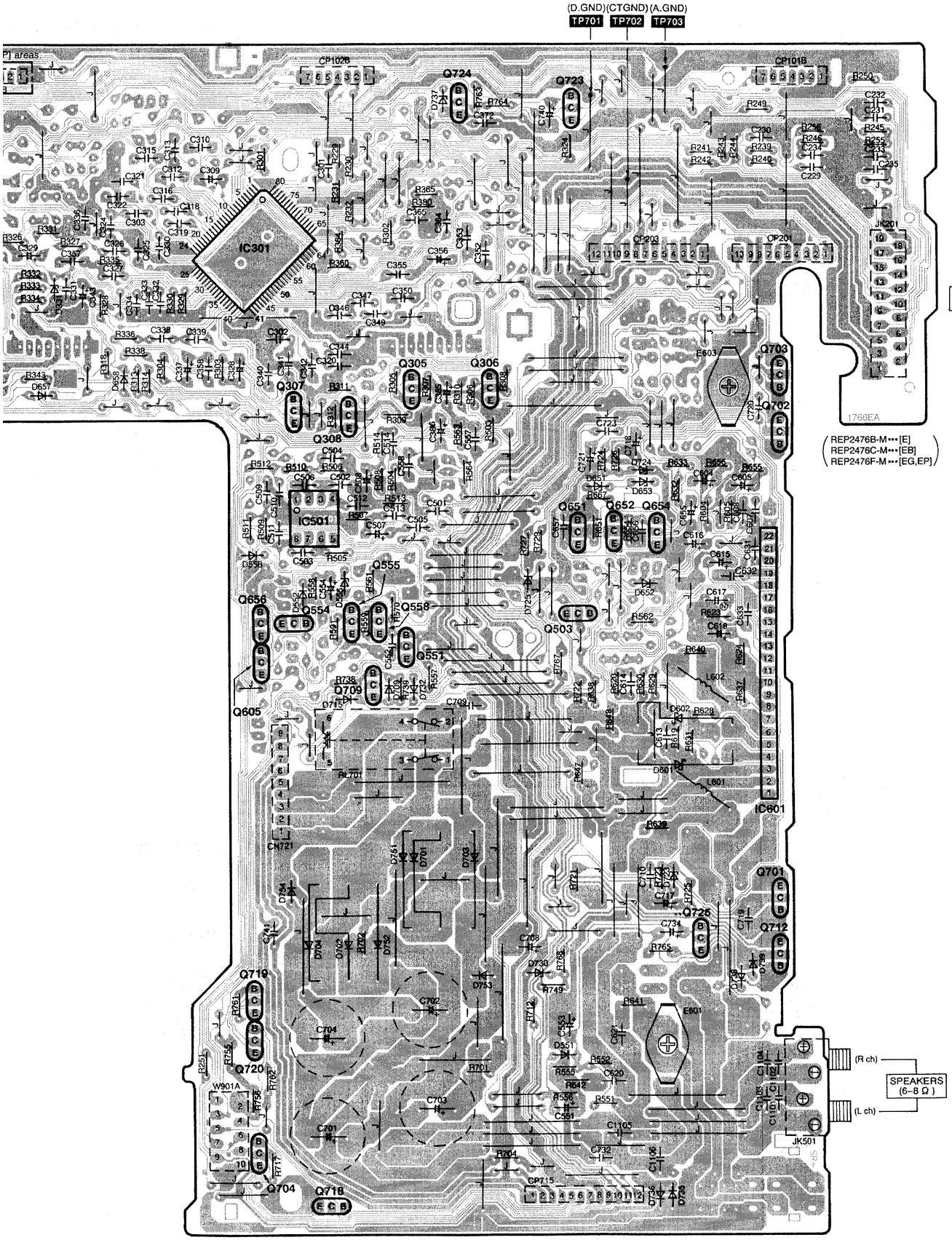


E IN/OUT TERMINAL P.C.B.

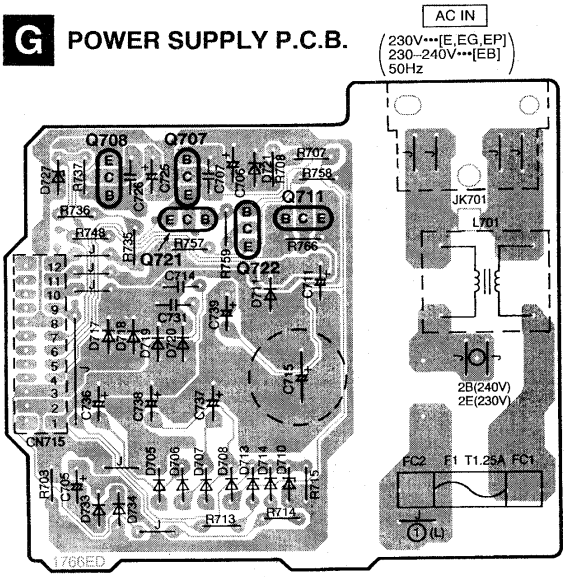
SH-EH50



r [E,EB,EG,EP] areas.

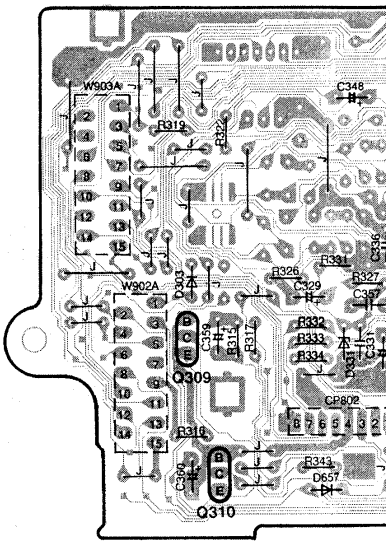


G POWER SUPPLY P.C.B.

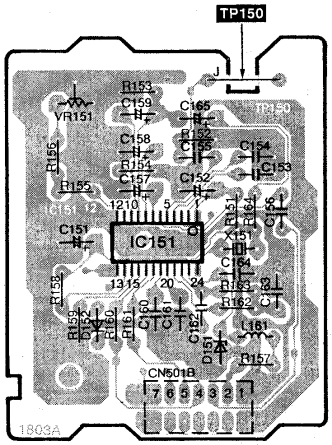


(REP2476B-M•••[E]
REP2476C-M•••[EB]
REP2476F-M•••[EG,EP])

F MAIN P.C.B. For [GC] area

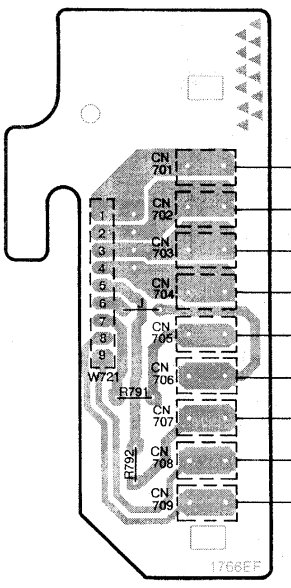


J RDS P.C.B. For [EG,EP] areas.



(REP2517A–T)

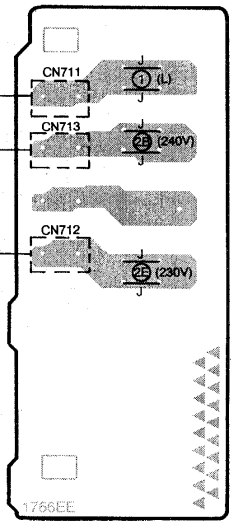
H POWER TRANSFORMER (A) P.C.B.



(REP2476B-M•••[E]
REP2476C-M•••[EB]
REP2476F-M•••[EG,EP])

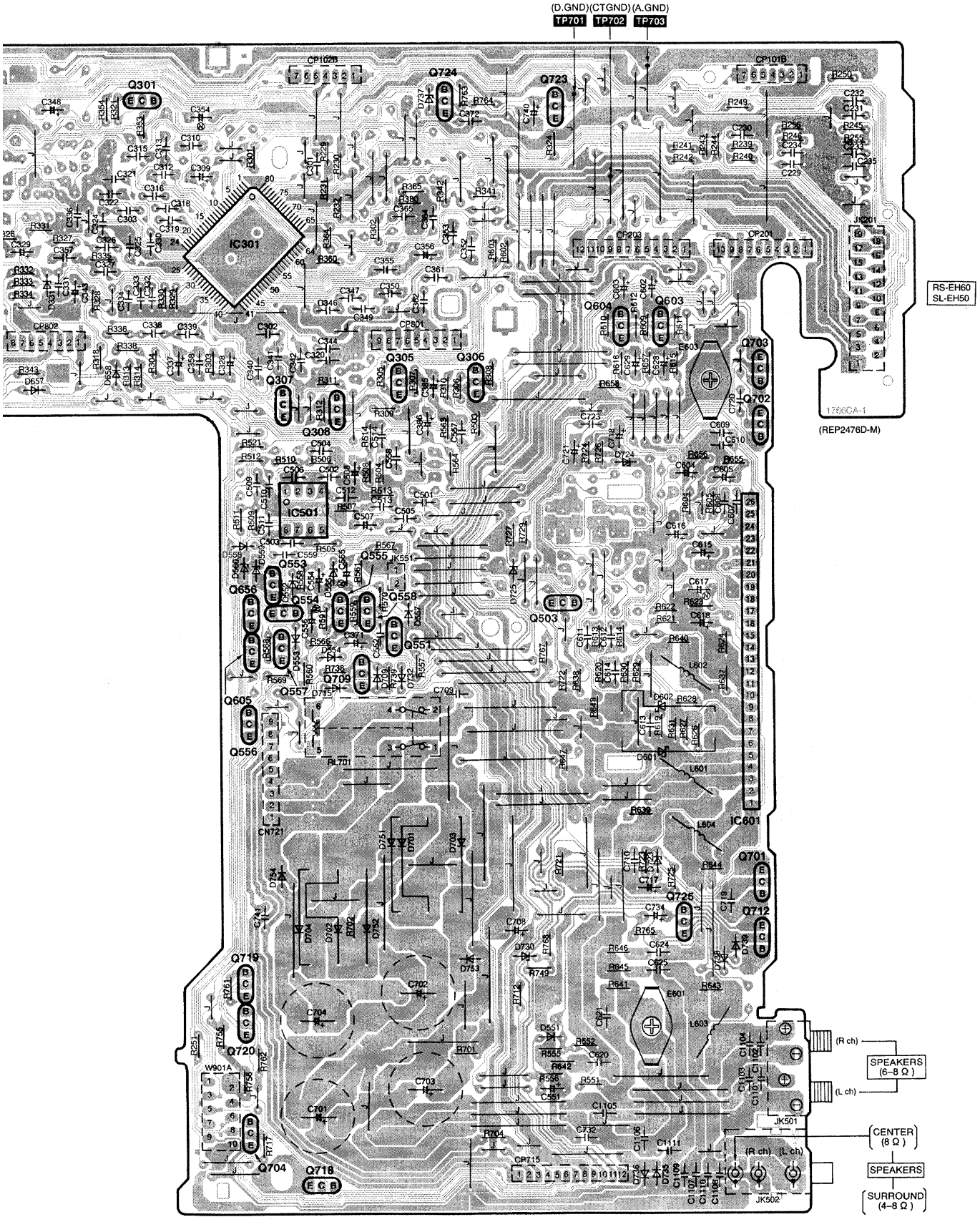
T501(POWER TRANSFORMER)

I POWER TRANSFORMER (B) P.C.B.

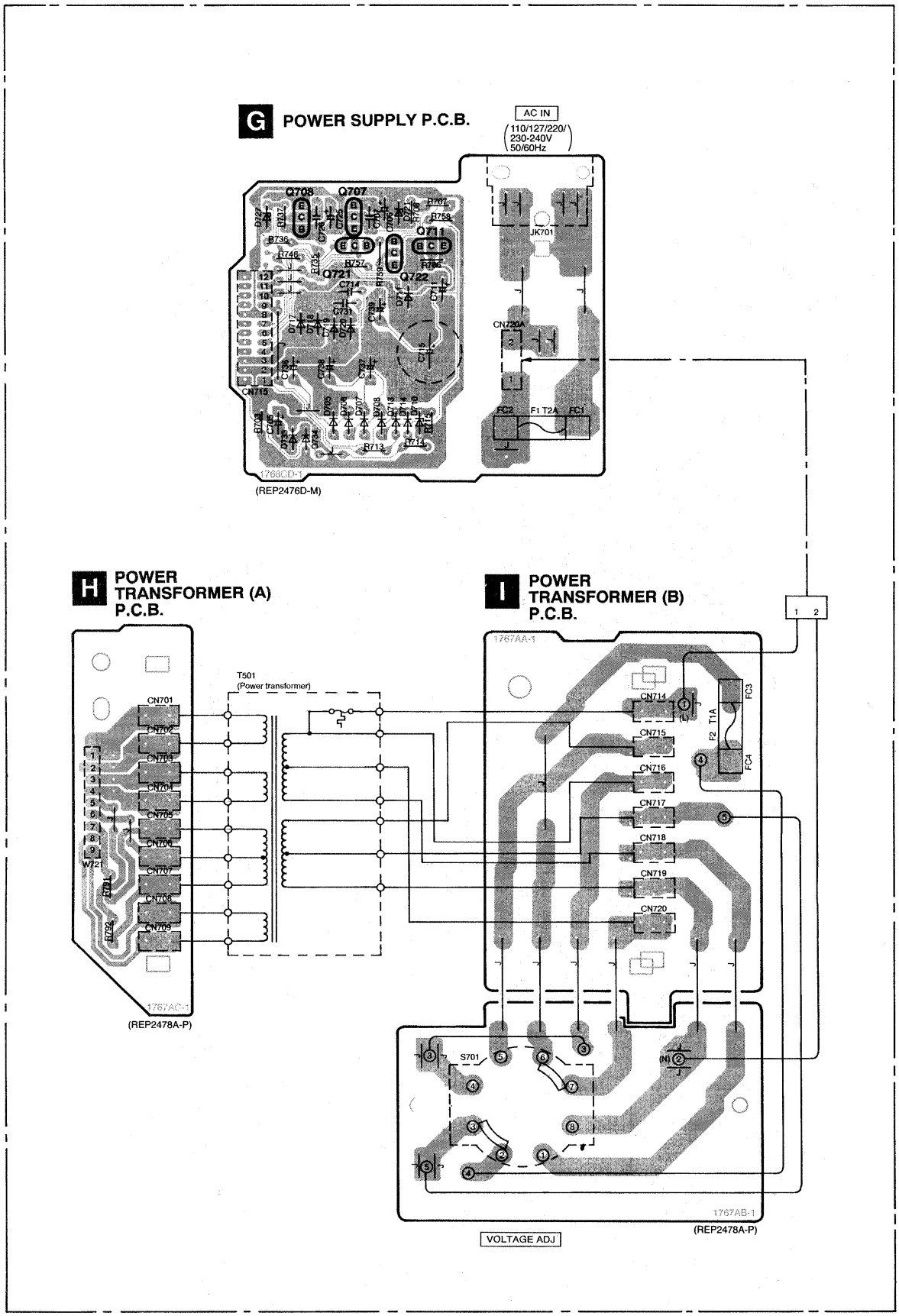


(REP2476B-M•••[E]
REP2476C-M•••[EB]
REP2476F-M•••[EG,EP])

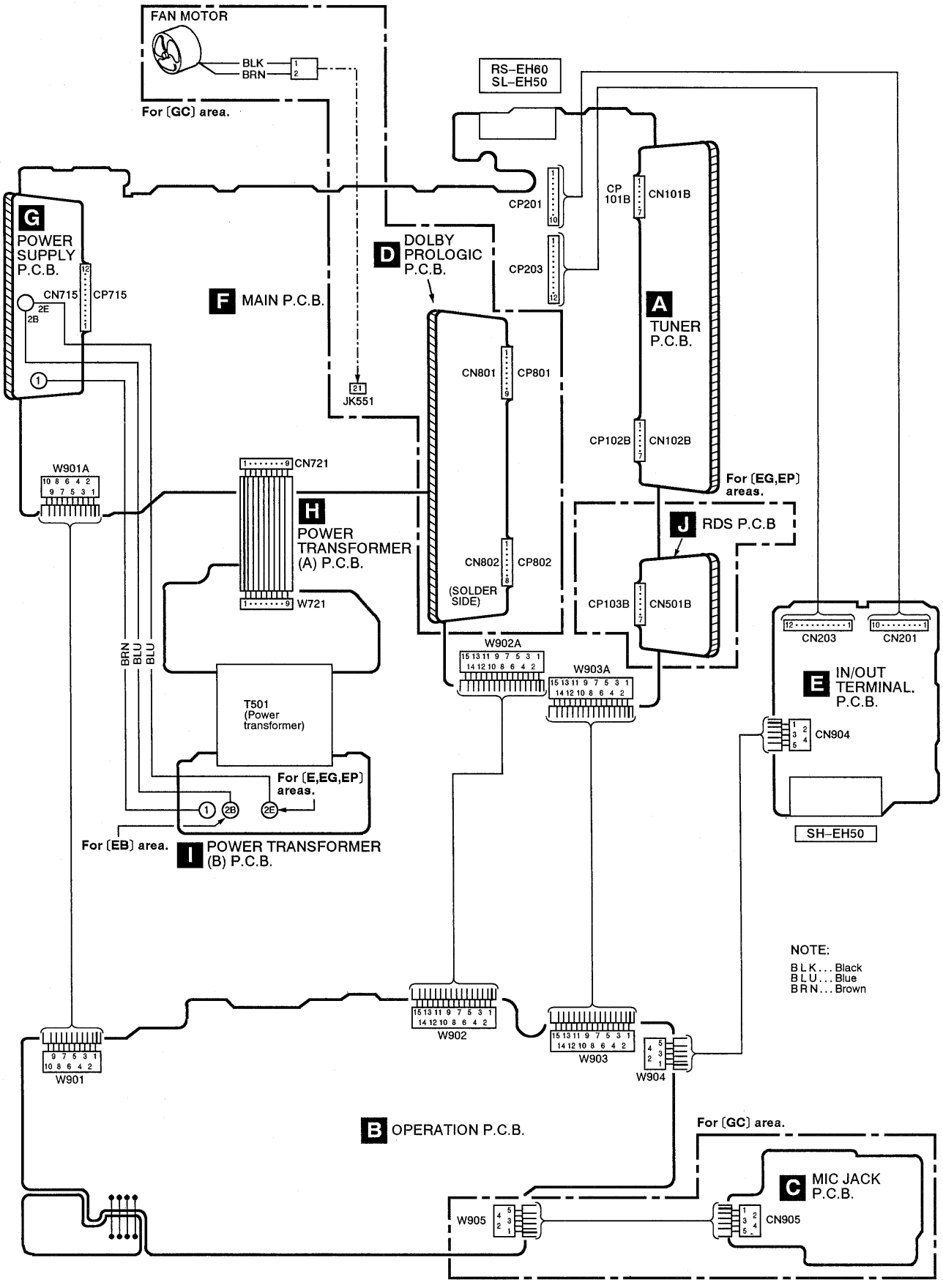
[GC] area.


(D.GND)(CTGND)(A.GND)
TP701 TP702 TP703
RS-EH60
SL-EH50
1766CA-1
(REP2476D-M)
IC301
IC501
IC601
Q301
Q724
Q723
Q604
Q603
Q703
Q702
Q305
Q306
Q307
Q308
Q553
Q656
Q554
Q558
Q555
Q551
Q503
Q709
Q557
Q605
Q556
Q701
Q712
Q725
Q719
Q720
Q704
Q718
(R ch)
(L ch)
SPEAKERS
(6–8 Ω)
JK501
CENTER
(8 Ω)
SPEAKERS
SURROUND
(4–8 Ω)
JK502

POWER SOURCE P.C.B. For [GC] area.



■ Wiring Connection Diagram



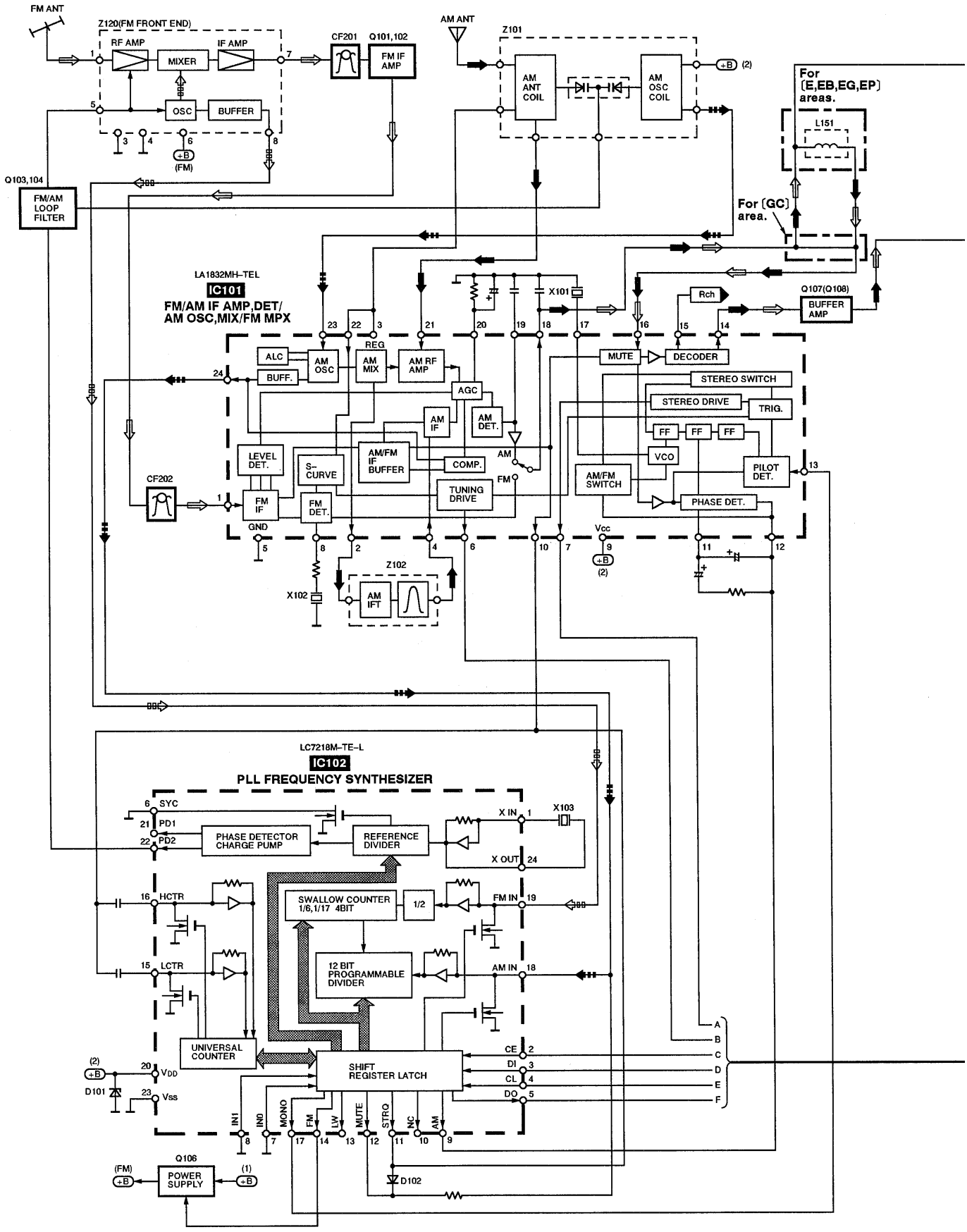
■ Terminal Function of IC's

• IC901 (M38198MC097F)...For (E)/(EP), (EB) and (EG) areas : SYSTEM CONTROL / FL DRIVE
(M38198MC099F)...For (GC) area

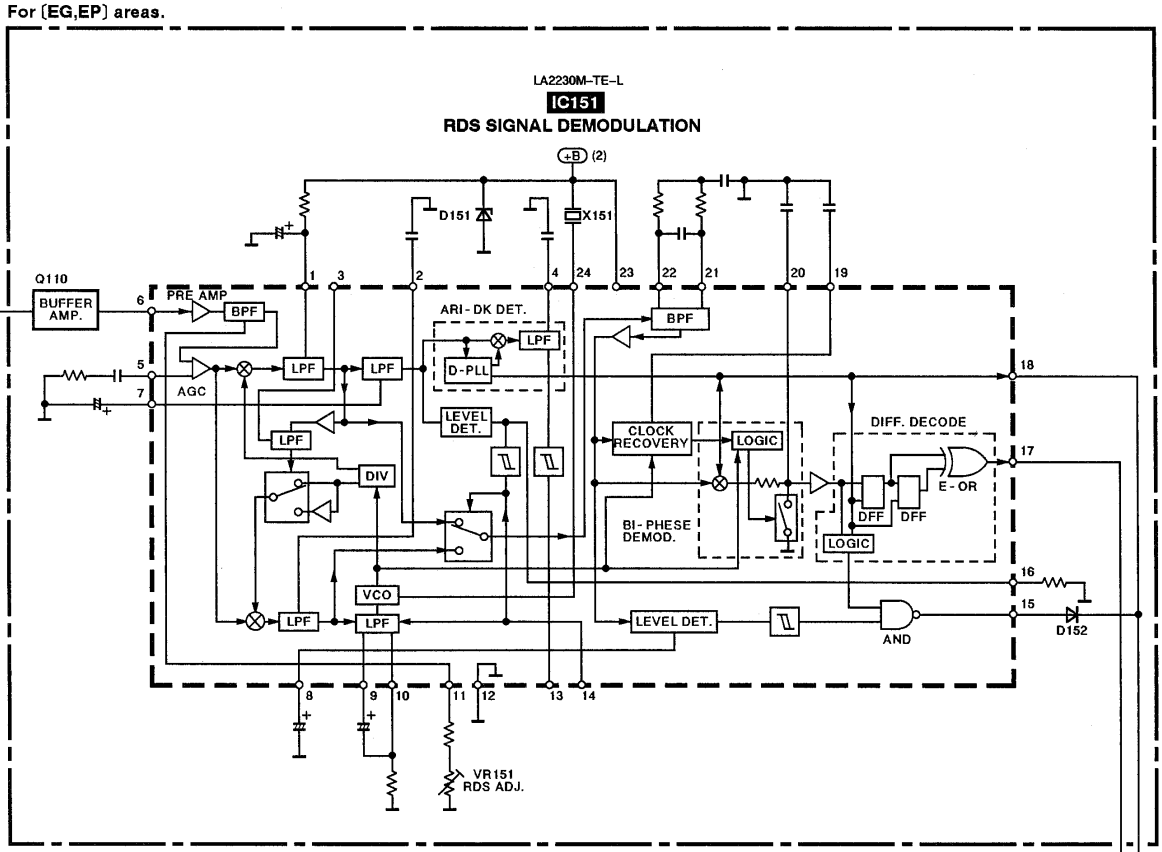
Pin No.	Terminal Name	I/O	Function
1	KEY TU	I	Operation switch signal input (TUNER, TIMER, AMP. section)
2	KEY KRAOKE	I	Operation switch signal input (KARAOKE section)
3	KEY SH	I	SH-EH50 Operation switch signal input
4	KEY CD	I	SL-EH50 Operation switch signal input (CD section)
5	KEY CD2	I	SL-EH50 Operation switch signal input (Changer section)
6	DATA1	O	Data signal output for M62433, M62425, LC7218 and LV1030
7	CLK1	O	Clock signal output for M62433, M62425, LC7218 and LV1030
8	CLK2	O	Clock signal output for M62425 (center and surround volume of dolby pro logic)
9	CLK3	O	Serial communication signal to SH-EH50 (Clock signal output)
10	DATA2	O	Serial communication signal to SH-EH50 (Data signal output)
11	CE2	O	Serial communication signal to SH-EH50 (Chip enable signal output)
12	SEL/TUNER	O	LED (D908) drive signal output (TUNER: "H")
13	SEL/TUNER	O	LED (D908) drive signal output (TUNER: "L")
14	LATCH	O	Latch signal output to M62433FP
15	REQ	O	Request signal output to LV1030
16	CE1	O	Chip enable signal output to LC7218
17	DATA IN	I	Data signal input from LC7218
18	CR TIMER	I/O	TIME CONSTANT terminal
19	CD & DECK CS	I	Serial data communication starting signal input (CD and DECK mechanism)
20	CD & DECK SCLK IN	I	Serial clock input (CD and DECK mechanism)
21	CD & DECK SDA OUT	O	Serial data output (CD and DECK mechanism)
22	CD & DECK SDA IN	I	Serial data input (CD and DECK mechanism)
23	MD REQ	O	Not used, open
24	SEL MD	O	
25	DECK REQ	O	RS-EH60 request signal output
26	CD REQ	O	SL-EH50 request signal output
27	DPL & CHECK	O	Clock check signal terminal
28	RDS DATA	I	Not used, open
29	RDS CLK	I	
30	REMOCON	I	Remote control signal input
31, 32	D1, D2	O	ECHO level set up signal output
33	ECHO	O	

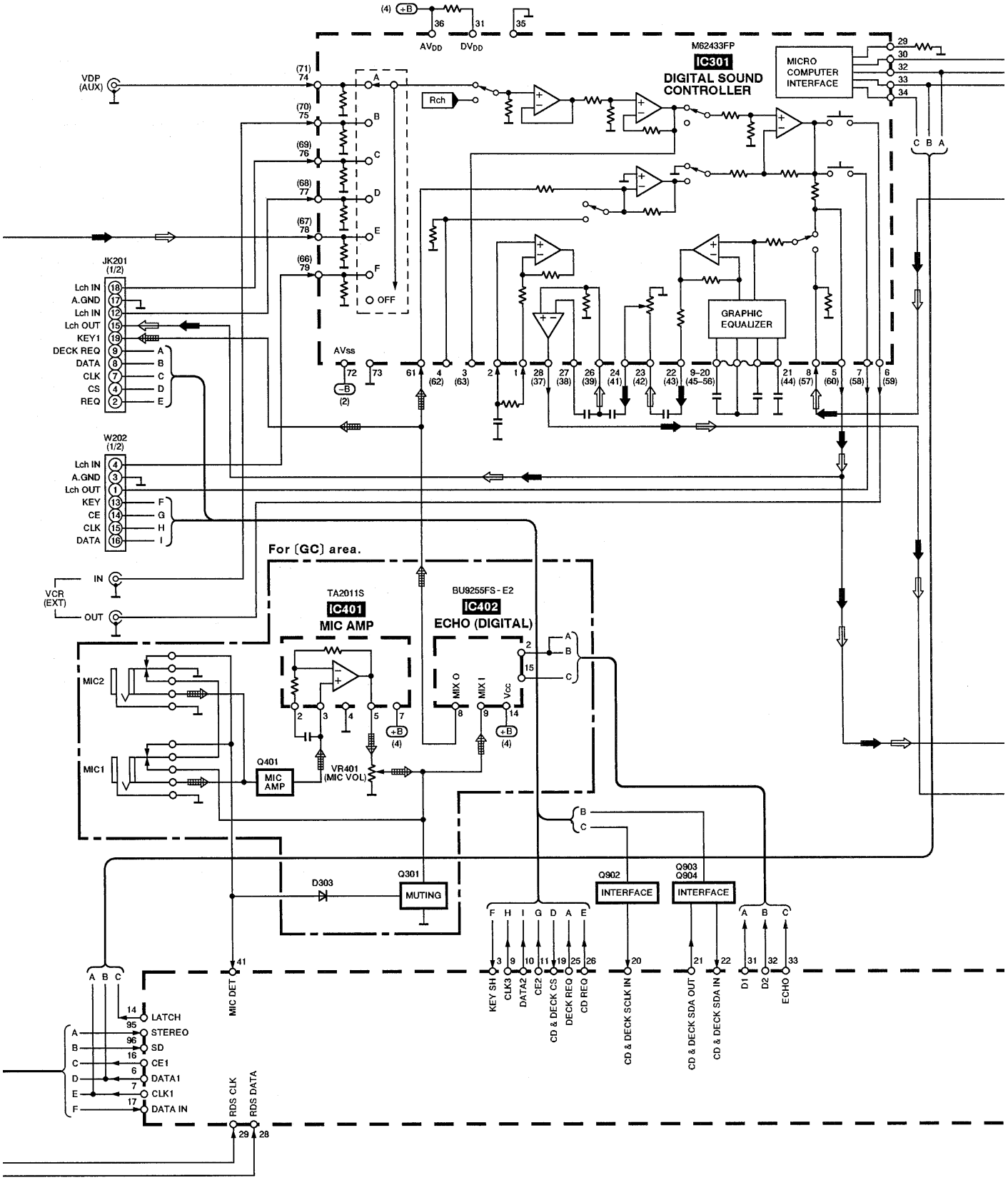
Pin No.	Terminal Name	I/O	Function
34	SYNC	I	AC power source input terminal
35	RESET	I	Reset signal input
36	XC IN	I	Oscillator connected terminal (f = 32 kHz)
37	XC OUT	O	
38	X IN	I	Oscillator connected terminal (f = 6 MHz)
39	X OUT	O	
40	Vss	—	GND terminal
41	MIC DET	I	Microphone connecting detect signal input
42	MUTE	O	Muting signal output
43	V JOGB	I	Volume control signal input
44	V JOGA	I	
45	POWER	O	Power control signal output
46	3DVOCAL	O	3D Vocal control signal output
47	NC	—	No used, open
48~54	7G~1G	O	Grid signal and chip select scan signal output
55~85	P31~P1	O	Segment signal output
86, 87	CS0, CS1	I	Chip select signal input
88	SEL TAPE	O	Tape select signal output
89	MIC S1	O	Microphone signal output for ECHO (except for CD)
90	MIC S2	O	Microphone through signal output (except for CD)
91	VCC	—	Power supply
92	VIBRATE	—	Not used, open
93	CHORUS	—	Not used, open
94	WIDE	—	Not used, open
95	STEREO	I	STEREO signal input for tuner circuit
96	SD	I	Station detector signal input for tuner circuit
97	IJO	I	Unusual condition detect terminal ("L": unusual
98	-VP	—	Reference voltage input (negative)
99	AVSS	—	Connect to GND
100	VREF	—	Reference voltage input (positive)

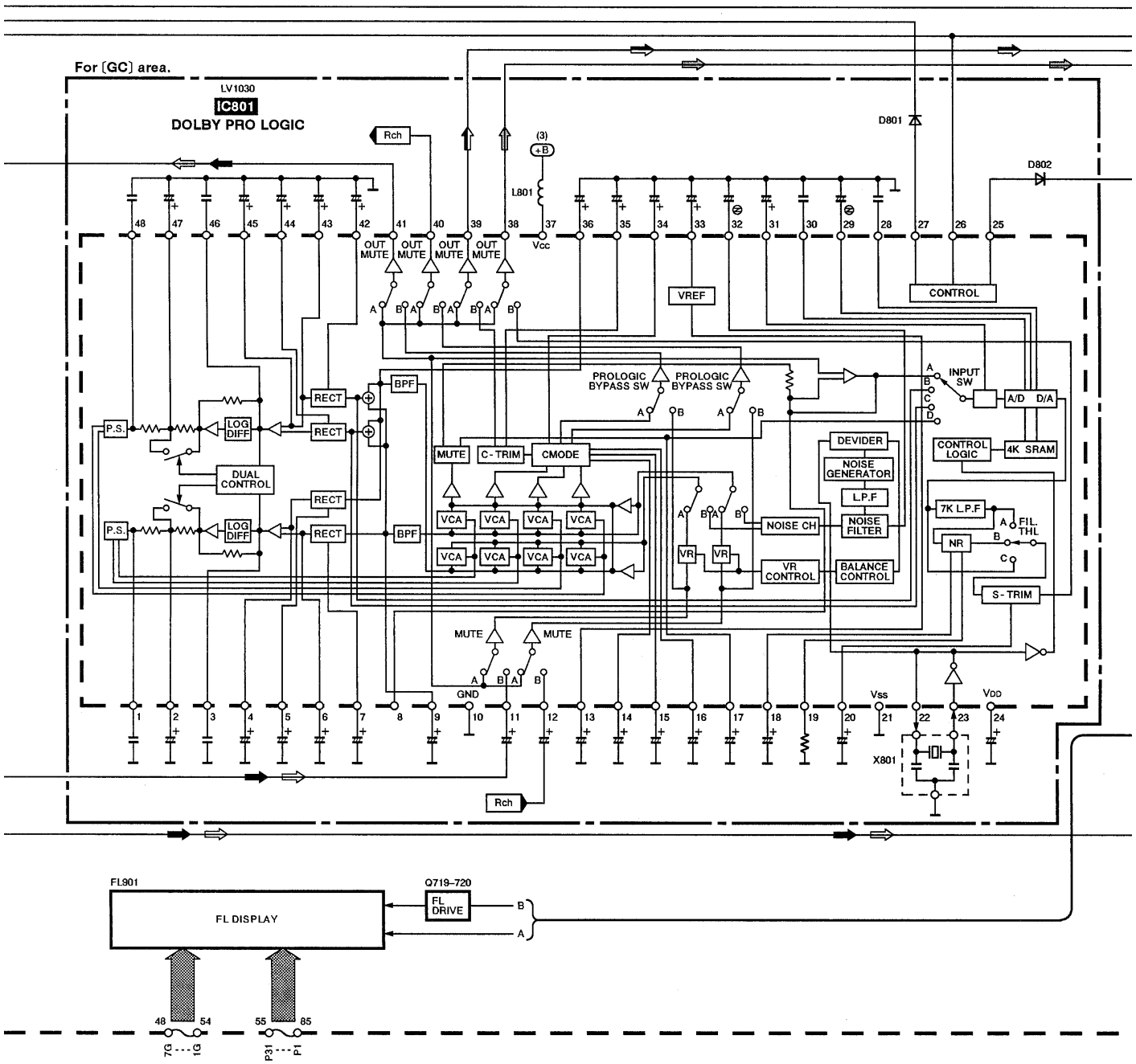
■ Block Diagram



For (EG,EP) areas.

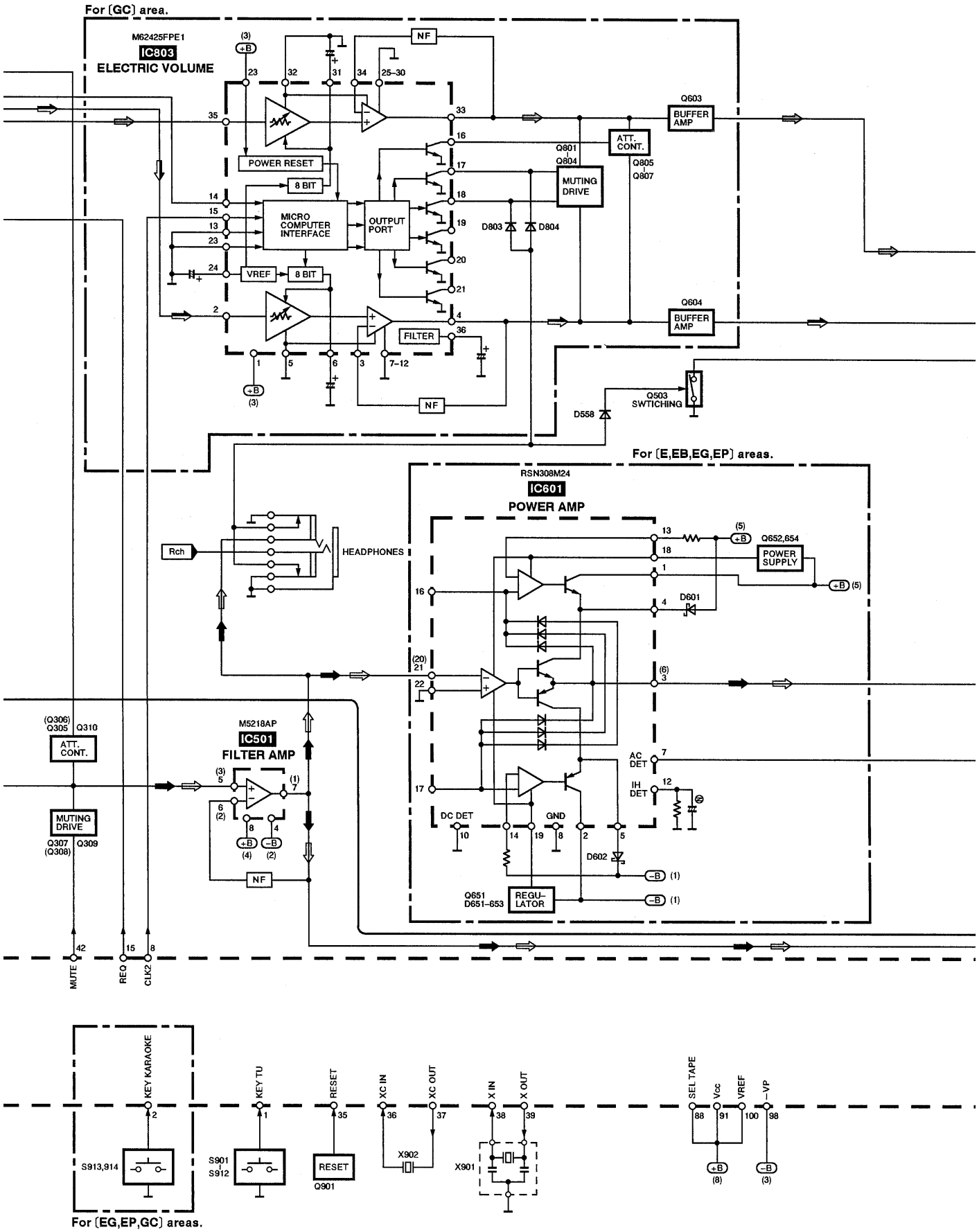


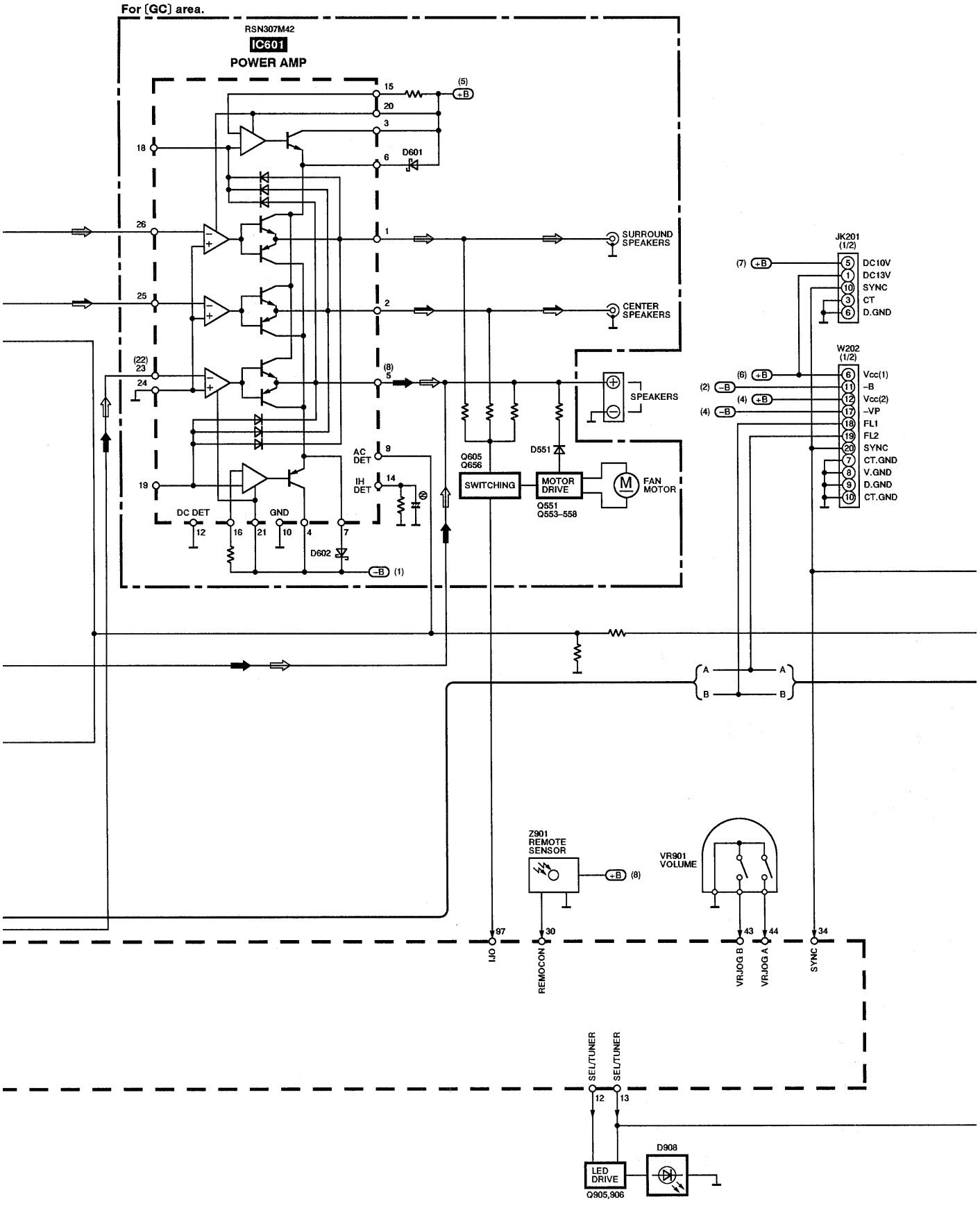

M62433FP
IC301
DIGITAL SOUND CONTROLLER
MICRO COMPUTER INTERFACE
GRAPHIC EQUALIZER
VDP (AUX)
JK201 (1/2)
Lch IN
A.GND
Lch IN
Lch OUT
KEY1
DECK REQ
DATA
CLK
CS
REQ
W202 (1/2)
Lch IN
A.GND
Lch OUT
KEY
CE
CLK
DATA
For [GC] area.
VCR (EXT)
IN
OUT
TA2011S
IC401
MIC AMP
BU9255FS-E2
IC402
ECHO (DIGITAL)
MIC2
MIC1
Q401
MIC AMP
VR401 (MIC VOL)
D303
Q301
MUTING
Q902
INTERFACE
Q903
Q904
INTERFACE
OFF
Rch
AVss
AVDD
DVDD
LATCH
STEREO
SD
CE1
DATA1
CLK1
DATA IN
MIC DET
RDS CLK
RDS DATA
KEY SH
CLK3
DATA2
CE2
CD & DECK CS
DECK REQ
CD REQ
CD & DECK SCLK IN
CD & DECK SDA OUT
CD & DECK SDA IN
D1
D2
ECHO

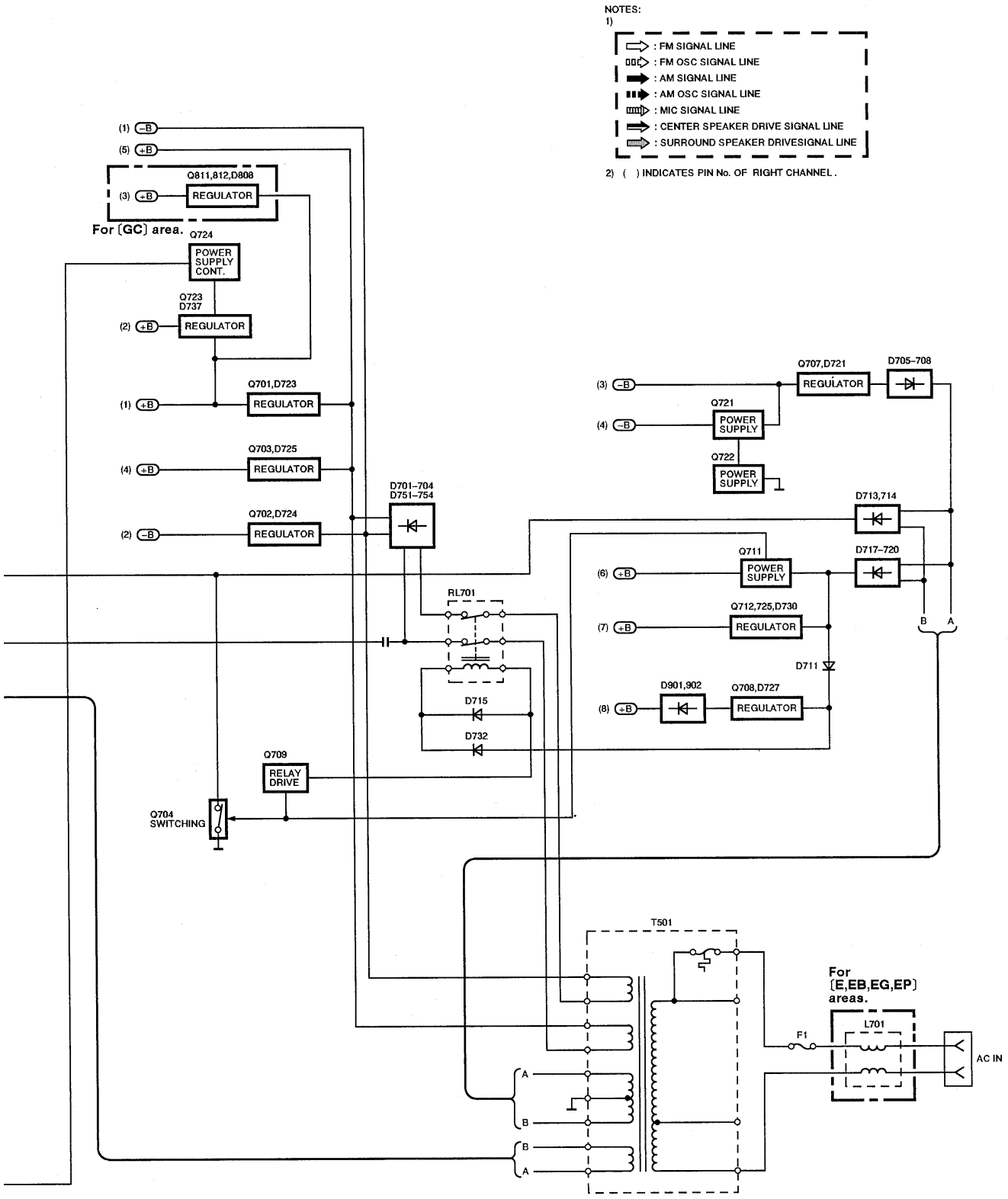


M38198MC097F••• [E,EB,EG,EP]
M38198MC099F••• [GC]

IC901
SYSTEM CONTROL / FL DRIVE


For [GC] area.
M62425FPE1
IC803
ELECTRIC VOLUME
NF
POWER RESET
8 BIT
MICRO COMPUTER INTERFACE
OUTPUT PORT
VREF
FILTER
MUTING DRIVE
ATT. CONT.
BUFFER AMP
Q603
Q604
Q801
Q804
Q805
Q807
D803
D804
Q503 SWTICHING
D558
For [E,EB,EG,EP] areas.
RSN308M24
IC601
POWER AMP
HEADPHONES
Rch
Q652,654
POWER SUPPLY
D601
D602
AC DET
IH DET
DC DET
GND
Q651 D651-653
REGU-LATOR
M5218AP
IC501
FILTER AMP
(Q306) Q305
Q310
Q307 (Q308)
Q309
MUTE
REQ
CLK2
KEY KARAOKE
KEY TU
RESET
XC IN
XC OUT
X IN
X OUT
SEL TAPE
Vcc
VREF
-VP
S913,914
S901 S912
Q901
X902
X901
For [EG,EP,GC] areas.


For [GC] area.
RSN307M42
IC601
POWER AMP
SURROUND SPEAKERS
CENTER SPEAKERS
SPEAKERS
JK201 (1/2)
DC10V
DC13V
SYNC
CT
D.GND
W202 (1/2)
Vcc(1)
-B
Vcc(2)
-VP
FL1
FL2
SYNC
CT.GND
V.GND
D.GND
CT.GND
AC DET
IH DET
DC DET
GND
D601
D602
D551
Q605
Q656
SWITCHING
MOTOR DRIVE
Q551
Q553–558
FAN MOTOR
Z901
REMOTE SENSOR
VR901
VOLUME
IJO
REMOCON
VRJOG B
VRJOG A
SYNC
SEL/TUNER
SEL/TUNER
LED DRIVE
Q905,906
D908


NOTES:
1)
: FM SIGNAL LINE
: FM OSC SIGNAL LINE
: AM SIGNAL LINE
: AM OSC SIGNAL LINE
: MIC SIGNAL LINE
: CENTER SPEAKER DRIVE SIGNAL LINE
: SURROUND SPEAKER DRIVESIGNAL LINE
2) ( ) INDICATES PIN No. OF RIGHT CHANNEL.
(1) -B
(5) +B
Q811,812,D808
(3) +B
REGULATOR
For [GC] area.
Q724
POWER SUPPLY CONT.
Q723 D737
(2) +B
REGULATOR
Q701,D723
(1) +B
REGULATOR
Q703,D725
(4) +B
REGULATOR
Q702,D724
(2) -B
REGULATOR
D701-704 D751-754
RL701
D715
D732
Q709
RELAY DRIVE
Q704 SWITCHING
(3) -B
Q707,D721
REGULATOR
D705-708
(4) -B
Q721
POWER SUPPLY
Q722
POWER SUPPLY
D713,714
(6) +B
Q711
POWER SUPPLY
D717-720
(7) +B
Q712,725,D730
REGULATOR
B
A
D711
(8) +B
D901,902
Q708,D727
REGULATOR
T501
A
B
B
A
For [E,EB,EG,EP] areas.
F1
L701
AC IN

■ Replacement Parts List (Electrical) [For (E) and (EB) areas]

Notes: *Important safety notice:
Components identified by ⚠ mark have special characteristics important for safety.
Furthermore, special parts which have purposes of fire-retardant (resistors), high-quality sound (capacitors), low-noise (resistors), etc. are used.
When replacing any of components, be sure to use only manufacture's specified parts shown in the parts list.
*The parenthesized indications in the Remarks columns specify the areas. (Refer to the cover page for area.)
Parts without these indications can be used for all areas.
*[M] Indicates in Remarks columns parts that are supplied by MESA.

Ref. No.	Part No.	Part Name & Description	Remarks
		INTEGRATED CIRCUIT(S)	
IC101	LA1832MH-TEL	IC	[M]
IC102	LC7218M-TE-L	IC	[M]
IC301	M62433FP	IC	[M]
IC501	M5218AP	IC	[M]
IC601⚠	RSN308M24	IC	[M]
IC901	M38198MC097F	IC	[M]
		TRANSISTOR(S)	
Q101, 102	2SC2787L	TRANSISTOR	[M]
Q103, 104	2SC2785FE	TRANSISTOR	[M]
Q106	UN411FTA	TRANSISTOR	[M]
Q107, 108	2SC3311AR	TRANSISTOR	[M]
Q305, 306	2SC3311AIRTA	TRANSISTOR	[M]
Q307, 308	2SD2144S	TRANSISTOR	[M]
Q309, 310	UN4115	TRANSISTOR	[M]
Q503	2SD1450RTA	TRANSISTOR	[M]
Q551	2SA1309AIRTA	TRANSISTOR	[M]
Q554	2SA1309AIRTA	TRANSISTOR	[M]
Q555	2SD2144S	TRANSISTOR	[M]
Q558	2SD2144S	TRANSISTOR	[M]
Q605	2SC3311AIRTA	TRANSISTOR	[M]
Q651⚠	2SB1238QRTV6	TRANSISTOR	[M]
Q652	2SD1859QRTV2	TRANSISTOR	[M]
Q654	2SD1859QRTV2	TRANSISTOR	[M]
Q656	2SC3311AIRTA	TRANSISTOR	[M]
Q701⚠	2SD2374PQAU	TRANSISTOR	[M]
Q702⚠	2SB1548PQAU	TRANSISTOR	[M]
Q703⚠	2SD2374PQAU	TRANSISTOR	[M]
Q704	UN4211	TRANSISTOR	[M]
Q707⚠	2SB621A-R	TRANSISTOR	[M]
Q708⚠	2SD2137PQTA	TRANSISTOR	[M]
Q709	2SD2144S	TRANSISTOR	[M]
Q711	2SB1417PQTA	TRANSISTOR	[M]
Q712⚠	2SB1548PQAU	TRANSISTOR	[M]
Q718	UN4111	TRANSISTOR	[M]
Q719, 720	2SD1450RTA	TRANSISTOR	[M]
Q721	2SC3311AIRTA	TRANSISTOR	[M]
Q722	2SA1309AIRTA	TRANSISTOR	[M]
Q723⚠	2SC3940AQSTA	TRANSISTOR	[M]
Q724	UN4211	TRANSISTOR	[M]
Q725⚠	2SC3311AIRTA	TRANSISTOR	[M]
Q901	UN4214TA	TRANSISTOR	[M]
Q902-904	2SC3311AIRTA	TRANSISTOR	[M]
Q905, 906	UN411FTA	TRANSISTOR	[M]
		DIODE(S)	
D101⚠	MA4051MTA	DIODE	[M]
D102	MA165	DIODE	[M]
D331	MA4051-L	DIODE	[M]
D551, 552	MA165	DIODE	[M]
D555	MA4100MTA	DIODE	[M]
D558	MA165	DIODE	[M]
D601, 602	SB360L6508	DIODE	[M]
D651⚠	MA4200M	DIODE	[M]
D652, 653⚠	MA4140M	DIODE	[M]
D657, 658	MA165	DIODE	[M]
D701-704⚠	1N5402BF	DIODE	[M]
D705-708⚠	RL1N4003N02	DIODE	[M]
D709	MA165	DIODE	[M]
D710	MA4051MTA	DIODE	[M]
D711	RL1N4003N02	DIODE	[M]
D713, 714⚠	MA185TA	DIODE	[M]
D715	MA165	DIODE	[M]
D717-720⚠	RL1N4003N02	DIODE	[M]
D721⚠	MA4300M	DIODE	[M]
D723⚠	MA4150M	DIODE	[M]
D724, 725⚠	MA4082LTA	DIODE	[M]
D727⚠	MA4062-H	DIODE	[M]
D730⚠	MA4100MTA	DIODE	[M]
D732-736	MA165	DIODE	[M]
D737⚠	MA4082LTA	DIODE	[M]
D738, 739	MA165	DIODE	[M]
D751, 752⚠	1N5402BF	DIODE	[M]
D753, 754⚠	RL1N4003N02	DIODE	[M]
D901, 902	1SS291TA	DIODE	[M]
D903, 904	MA165	DIODE	[M]
D905	1SS291TA	DIODE	[M]
D906, 907	MA165	DIODE	[M]
D908	SPR505MDTT	L. E. D.	[M]
D909	MA165	DIODE	[M]
D931	MA165	DIODE	[M]
D934	MA165	DIODE	[M]
D936	MA165	DIODE	[M]
D943	MA165	DIODE	[M]
D971, 972	MA165	DIODE	[M]
D973	MA4039MTA	DIODE	[M]

Ref. No.	Part No.	Part Name & Description	Remarks
		VARIABLE RESISTOR(S)	
VR901	EVQVBXFK124B	V. R	[M]
		COMPONENT COMBINATION(S)	
Z101	RLA2Z002M-T	COMPONENT COMBINATION	[M]
Z102	RLI2Z006M-T	COMPONENT COMBINATION	[M]
Z120	RAL0019	FM FRONT END	[M]
Z901	RCDGP1U28XD	REMOTE SENSOR	[M]
		COIL(S)	
L101	ELESNR68MA	COIL	[M]
L103	ELEXTR47MA9	COIL	[M]
L105, 106	ELELN822KL	COIL	[M]
L151	SLM1B10M-1M	COIL	[M]
L191	ELESNR68MA	COIL	[M]
L601, 602	SLQY07G-40	COIL	[M]
L701⚠	RLQZ271M-K	COIL	[M]
L901	RLQA100JT-Y	COIL	[M]
		TRANSFORMER(S)	
T501⚠	RTP2N5B009	POWER TRANSFORMER	[M]
		FILTER(S)	
CF201	RLFFETNGD01L	CERAMIC FILTER	[M]
CF202	RLFFETMGD01L	CERAMIC FILTER	[M]
		OSCILLATOR(S)	
X101	RSXZ456KM07M	OSCILLATOR	[M]
X102	RLFDGT05DD	OSCILLATOR	[M]
X103	RSXC7M20S05T	OSCILLATOR	[M]
X901	EF0EC6004T4	OSCILLATOR	[M]
X902	RSXD32K7S02	OSCILLATOR	[M]
		DISPLAY TUBE	
FL901	RSL0234-F	DISPLAY TUBE	[M]
		FUSE(S)	
F1⚠	XBA2C12TB0S	FUSE	[M]
		SWITCH(ES)	
S901-912	EVQ21405R	SW	[M]
		CONNECTOR(S)	

Ref. No.	Part No.	Part Name & Description	Remarks
CN201	RJU057W010	CONNECTOR(10P)	[M]
CN203	RJU057W012	CONNECTOR(12P)	[M]
CN701-709	RJS1A1101T1	CONNECTOR(1P)	[M]
CN711-713	RJS1A1101T1	CONNECTOR(1P)	[M]
CN715	RJU057W012	CONNECTOR(12P)	[M]
CN721	RJS9T5ZA	CONNECTOR(9P)	[M]
CN904	RJS2A2105	CONNECTOR(5P)	[M]
CN101B	RJU057W007	CONNECTOR(7P)	[M]
CN102B	RJU057W007	CONNECTOR(7P)	[M]
CP201	RJT057W010-1	CONNCTOR(10P)	[M]
CP203	RJT057W012-1	CONNECTOR(12P)	[M]
CP715	RJT057W012-1	CONNECTOR(12P)	[M]
CP101B	RJT057W007-1	CONNECTOR(7P)	[M]
CP102B	RJT057W007-1	CONNECTOR(7P)	[M]
		EARTH TERMINAL(S)	
E601	SNE1004-2	EARTH TERMINAL	[M]
E603	SNE1004-2	EARTH TERMINAL	[M]
		FUSE HOLDER(S)	
FC1, 2	EYF52BC	FUSE HOLDER	[M]
		RELAY(S)	
RL701⚠	RSY0030-C	RELAY	[M]
		JACK(S)	
JK101	RJH5210M	ANTENNA	[M]
JK201	RJT065K19	SYSTEM	[M]
JK203	SJF3068-7N	VCR IN	[M]
JK204	SJF3069-5N	VDP/VCR OUT	[M]
JK501	RJR0054M	SPEAKERS	[M]
JK701⚠	SJS9236	AC INLET	[M]
JK903	RJJ37TN01-C	HEADPHONES	[M]

■ Resistors and Capacitors [For (E) and (EB) areas]

Notes : * Capacity values are in microfarads (uF) unless specified otherwise, P=Pico-farads (pF) F=Farads (F)
* Resistance values are in ohms, unless specified otherwise, 1K=1,000 (OHM) , 1M=1,000k (OHM)

Ref. No.	Part No.	Values & Remarks
		RESISTORS
R103	ERDS2TJ330	1/4W 33 [M]
R104	ERDS2TJ103	1/4W 10K [M]
R105	ERDS2TJ471	1/4W 470 [M]
R106	ERDS2TJ474	1/4W 470K [M]
R107	ERDS2TJ331	1/4W 330 [M]
R108	ERDS2TJ474	1/4W 470K [M]
R109	ERDS2TJ331	1/4W 330 [M]
R110	ERDS2TJ102	1/4W 1K [M]
R112	ERDS2TJ104	1/4W 100K [M]
R113	ERDS2TJ103	1/4W 10K [M]
R114	ERDS2TJ562	1/4W 5.6K [M]
R115	ERDS2TJ561	1/4W 560 [M]
R116	ERDS2TJ102	1/4W 1K [M]
R117	ERDS2TJ823T	1/4W 82K [M]
R118	ERDS2TJ562	1/4W 5.6K [M]
R119	ERDS2TJ822	1/4W 8.2K [M]
R120	ERDS2TJ473	1/4W 47K [M]
R121	ERDS2TJ332	1/4W 3.3K [M]
R122	ERDS2TJ272T	1/4W 2.7K [M]
R124	ERDS2TJ271	1/4W 270 [M]
R125, 126	ERDS2TJ152	1/4W 1.5K [M]
R127	ERDS2TJ103	1/4W 10K [M]
R128	ERDS2TJ820	1/4W 82 [M]
R129	ERDS2TJ473	1/4W 47K [M]
R130	ERDS2TJ103	1/4W 10K [M]
R132	ERDS2TJ103	1/4W 10K [M]
R133-137	ERDS2TJ102	1/4W 1K [M]
R138	ERDS2TJ103	1/4W 10K [M]
R139, 140	ERDS2TJ272T	1/4W 2.7K [M]
R141, 142	ERDS2TJ102	1/4W 1K [M]
R143, 144	ERDS2TJ222	1/4W 2.2K [M]
R145, 146	ERDS2TJ821	1/4W 820 [M]
R147, 148	ERDS2TJ474	1/4W 470K [M]
R149	ERDS2TJ680T	1/4W 68 [M]
R171, 172	ERDS2TJ102	1/4W 1K [M]
R173	ERDS2TJ471	1/4W 470 [M]
R175	ERDS2TJ102	1/4W 1K [M]
R176	ERDS2TJ391	1/4W 390 [M]
R201, 202⚠	ERDS2FJ752	1/4W 7.5K [M]
R217, 218	ERDS2TJ562	1/4W 5.6K [M]
R221, 222	ERDS2FJ752	1/4W 7.5K [M]
R223, 224	ERDS2TJ562	1/4W 5.6K [M]
R225, 226	ERDS2TJ104	1/4W 100K [M]
R227, 228	ERDS2TJ222	1/4W 2.2K [M]
R229, 230	ERDS2TJ822	1/4W 8.2K [M]
R231-234	ERDS2TJ682T	1/4W 6.8K [M]
R235, 236	ERDS2TJ102	1/4W 1K [M]
R239-242	ERDS2TJ102	1/4W 1K [M]
R243, 244	ERDS2TJ152	1/4W 1.5K [M]
R245, 246	ERDS2TJ332	1/4W 3.3K [M]
R249, 250	ERDS2TJ101	1/4W 100 [M]
R251	ERDS2TJ222	1/4W 2.2K [M]
R253, 254	ERDS2TJ104	1/4W 100K [M]
R255, 256	ERDS2TJ123	1/4W 12K [M]
R257, 258	ERDS2TJ562	1/4W 5.6K [M]
R261, 262⚠	ERD25FVJ1R0T	1/4W 1.0 [M]
R301	ERDS2TJ223	1/4W 22K [M]
R302	ERDS2TJ472	1/4W 4.7K [M]
R303, 304	ERDS2TJ222	1/4W 2.2K [M]
R305, 306	ERDS2TJ152	1/4W 1.5K [M]
R307, 308	ERDS2TJ104	1/4W 100K [M]
R309, 310	ERDS2TJ102	1/4W 1K [M]
R311, 312	ERDS2TJ104	1/4W 100K [M]
R313, 314	ERDS2EJ121	1/4W 120 [M]
R315	ERDS2TJ104	1/4W 100K [M]
R316	ERDS2TJ222	1/4W 2.2K [M]
R317	ERDS2TJ105T	1/4W 1M [M]
R318	ERDS2TJ153	1/4W 15K [M]
R324	ERDS2TJ223	1/4W 22K [M]
R326	ERDS2TJ332	1/4W 3.3K [M]
R327	ERDS2TJ392T	1/4W 3.9K [M]
R328	ERDS2TJ332	1/4W 3.3K [M]
R329	ERDS2TJ103	1/4W 10K [M]
R330	ERDS2TJ332	1/4W 3.3K [M]
R331	ERDS2TJ102	1/4W 1K [M]
R332-334	ERDS2TJ222	1/4W 2.2K [M]
R335, 336	ERDS2TJ683	1/4W 68K [M]
R338	ERDS2TJ392T	1/4W 3.9K [M]
R343	ERDS2TJ334	1/4W 330K [M]
R360	ERDS2TJ223	1/4W 22K [M]
R364	ERDS2TJ103	1/4W 10K [M]
R365	ERDS2TJ223	1/4W 22K [M]
R380	ERDS2TJ153	1/4W 15K [M]
R503, 504	ERDS2TJ333	1/4W 33K [M]
R505, 506	ERDS2TJ153	1/4W 15K [M]
R507, 508	ERDS2TJ332	1/4W 3.3K [M]
R509-512	ERDS2TJ560T	1/4W 56 [M]
R513, 514	ERDS2TJ103	1/4W 10K [M]
R551	ERDS2TJ183T	1/4W 18K [M]
R552	ERDS2TJ473	1/4W 47K [M]
R555	ERDS2TJ223	1/4W 22K [M]
R556	ERDS2TJ104	1/4W 100K [M]
R557	ERDS2TJ103	1/4W 10K [M]
R558	ERDS2TJ102	1/4W 1K [M]
R559	ERDS2TJ472	1/4W 4.7K [M]
R561	ERDS2TJ104	1/4W 100K [M]
R562	ERDS2TJ102	1/4W 1K [M]
R563, 564	ERDS2TJ273	1/4W 27K [M]
R570	ERDS2TJ335T	1/4W 3.3M [M]
R591	ERDS2TJ473	1/4W 47K [M]
R604, 605	ERDS2TJ103	1/4W 10K [M]
R619, 620	ERDS2TJ563	1/4W 56K [M]
R623	ERDS2TJ684	1/4W 680K [M]
R624	ERDS2TJ223	1/4W 22K [M]
R628	ERDS2TJ184T	1/4W 180K [M]
R629, 630	ERDS2TJ100	1/4W 10 [M]
R631	ERDS2TJ224T	1/4W 220K [M]
R632, 633	ERDS2TJ563	1/4W 56K [M]
R637	ERDS2TJ154	1/4W 150K [M]
R638	ERDS2TJ684	1/4W 680K [M]
R639-642⚠	ERDS1FVJ100T	1/2W 10 [M]
R647, 648	ERQ16NKWR15E	1/6W 0.15 [M]
R651	ERDS2TJ222	1/4W 2.2K [M]
R654	ERDS2TJ222	1/4W 2.2K [M]
R655, 656	ERDS2TJ183T	1/4W 18K [M]
R667	ERDS2TJ331	1/4W 330 [M]
R701, 702	ERDS2TJ273	1/4W 27K [M]
R703, 704	ERDS2TJ101	1/4W 100 [M]
R707⚠	ERD25FVJ4R7T	1/4W 4.7 [M]
R708	ERDS2TJ472	1/4W 4.7K [M]
R712	ERDS2TJ152	1/4W 1.5K [M]
R713, 714	ERDS2TJ332	1/4W 3.3K [M]
R715	ERDS2TJ183T	1/4W 18K [M]
R717	ERDS2TJ473	1/4W 47K [M]
R721⚠	ERD2FCVJ4R7T	1/4W 4.7 [M]
R722⚠	ERQ16NKW2R2E	1/6W 2.2 [M]
R723	ERDS2TJ562	1/4W 5.6K [M]
R724	ERDS2TJ152	1/4W 1.5K [M]
R725, 726	ERDS2TJ100	1/4W 10 [M]
R727	ERDS2TJ152	1/4W 1.5K [M]
R729	ERDS2TJ221	1/4W 220 [M]
R735⚠	ERD25FVJ4R7T	1/4W 4.7 [M]
R736	ERDS2TJ102	1/4W 1K [M]
R737	ERDS2TJ221	1/4W 220 [M]
R738	ERDS2TJ392T	1/4W 3.9K [M]
R739	ERDS2TJ473	1/4W 47K [M]
R748	ERDS2TJ102	1/4W 1K [M]
R749	ERDS2TJ271	1/4W 270 [M]
R755⚠	ERDS1FVJ8R2T	1/2W 8.2 [M]
R756⚠	ERDS1FJ4R7	1/2W 4.7 [M]
R757-759	ERDS2TJ103	1/4W 10K [M]
R761, 762	ERDS2TJ822	1/4W 8.2K [M]
R763	ERDS2TJ472	1/4W 4.7K [M]
R764	ERDS2TJ331	1/4W 330 [M]

Ref. No.	Part No.	Values & Remarks
R765⚠	ERDS1FVJ561T	1/2W 560 [M]
R766	ERDS2TJ102	1/4W 1K [M]
R767⚠	ERD2FCVJ4R7T	1/4W 4.7 [M]
R768	ERDS2TJ101	1/4W 100 [M]
R791, 792⚠	RSFMB30KT-L	PROTECTOR [M]
R901	ERDS2TJ821	1/4W 820 [M]
R902	ERDS2TJ102	1/4W 1K [M]
R903	ERDS2TJ122	1/4W 1.2K [M]
R904	ERDS2TJ152	1/4W 1.5K [M]
R905	ERDS2TJ182	1/4W 1.8K [M]
R906	ERDS2TJ222	1/4W 2.2K [M]
R907	ERDS2TJ272T	1/4W 2.7K [M]
R908	ERDS2TJ472	1/4W 4.7K [M]
R909	ERDS2TJ682T	1/4W 6.8K [M]
R910	ERDS2TJ123	1/4W 12K [M]
R911	ERDS2TJ223	1/4W 22K [M]
R912	ERDS2TJ821	1/4W 820 [M]
R919-923	ERDS2TJ103	1/4W 10K [M]
R924-927	ERDS2TJ102	1/4W 1K [M]
R929	ERDS2TJ102	1/4W 1K [M]
R930	ERDS2TJ101	1/4W 100 [M]
R931-936	ERDS2TJ102	1/4W 1K [M]
R937	ERDS2TJ562	1/4W 5.6K [M]
R938	ERDS2TJ102	1/4W 1K [M]
R939	ERDS2TJ152	1/4W 1.5K [M]
R940, 941	ERDS2TJ102	1/4W 1K [M]
R942	ERDS2TJ101	1/4W 100 [M]
R943	ERDS2TJ102	1/4W 1K [M]
R946	ERDS2TJ102	1/4W 1K [M]
R947, 948	ERDS2TJ104	1/4W 100K [M]
R949	ERDS2TJ472	1/4W 4.7K [M]
R950	ERDS2TJ101	1/4W 100 [M]
R951	ERDS2TJ334	1/4W 330K [M]
R952	ERDS2TJ106T	1/4W 10M [M]
R953	ERDS2TJ101	1/4W 100 [M]
R954	ERDS2TJ104	1/4W 100K [M]
R955	ERDS2TJ824	1/4W 820K [M]
R956-958	ERDS2TJ102	1/4W 1K [M]
R959	ERDS2TJ471	1/4W 470 [M]
R960	ERDS2TJ152	1/4W 1.5K [M]
R961, 962	ERDS2TJ223	1/4W 22K [M]
R963, 964	ERDS2TJ103	1/4W 10K [M]
R965	ERDS2TJ472	1/4W 4.7K [M]
R966	ERDS2TJ103	1/4W 10K [M]
R967	ERDS2TJ473	1/4W 47K [M]
R968	ERDS2TJ103	1/4W 10K [M]
R969, 970	ERDS2TJ472	1/4W 4.7K [M]
R971	ERDS2TJ473	1/4W 47K [M]
R972	ERDS2TJ223	1/4W 22K [M]
R974	ERDS2TJ101	1/4W 100 [M]
R975	ERDS2TJ181T	1/4W 180 [M]
R977-981	ERDS2TJ104	1/4W 100K [M]
R984, 985	ERDS2TJ473	1/4W 47K [M]
R986-988	ERDS2TJ102	1/4W 1K [M]
R989, 990	ERDS2TJ393	1/4W 39K [M]
R991	ERDS2TJ473	1/4W 47K [M]
R993, 994	ERDS2TJ104	1/4W 100K [M]
R996, 997	ERDS2TJ151	1/4W 150 [M]
		CAPACITORS
C101	ECBT1C103NS5	16V 0.01U [M]
C103	ECBT1C103NS5	16V 0.01U [M]
C104, 105	ECBT1H102KB5	50V 1000P [M]
C106	ECBT1C103NS5	16V 0.01U [M]
C107	ECBT1H473ZF5	50V 0.047U [M]
C108	ECBT1H8R2KC5	50V 8.2P [M]
C109, 110	ECBT1C103NS5	16V 0.01U [M]
C111	ECEA1EKA4R7B	25V 4.7U [M]
C112	ECBT1C103NS5	16V 0.01U [M]
C113	ECBT1H102KB5	50V 1000P [M]
C114	RCE1HKA3R3BG	50V 3.3U [M]
C115	ECEA1EKA4R7B	25V 4.7U [M]
C116	ECBT1C822KS5	16V 8200P [M]
C117	ECQP1391JZ	100V 390P [M]
C118, 119	ECFR1C103KR	16V 0.01U [M]
C120, 121	ECEA1HKA010B	50V 1U [M]
C122	ECEA1HKA2R2B	50V 2.2U [M]
C123	ECEA1HKA010B	50V 1U [M]
C124	ECBT1H102KB5	50V 1000P [M]
C125	ECBT1H150JC5	50V 15P [M]
C126	ECBT1H473ZF5	50V 0.047U [M]
C127	ECEA1CKA220B	16V 22U [M]
C128	ECBT1H102KB5	50V 1000P [M]
C129, 130	ECEA0JKA101B	6.3V 100U [M]
C132	ECBT1H102KB5	50V 1000P [M]
C133, 134	ECBT1H270JU5	50V 27P [M]
C135, 136	ECBT1C103KS5	16V 0.01U [M]
C137, 138	ECBT1H561KB5	50V 560P [M]
C139, 140	ECBT1C682KR5	16V 6800P [M]
C141-144	ECEA1HKA010B	50V 1U [M]
C145	ECBT1H220JC5	50V 22P [M]
C148	ECBT1C103NS5	16V 0.01U [M]
C149	ECBT1H104ZF5	50V 0.1U [M]
C171, 172	ECBT1H102KB5	50V 1000P [M]
C173	ECEA1CKA220B	16V 22U [M]
C174	RCE1CKA100BG	16V 10U [M]
C181	ECBT1H471KB5	50V 470P [M]
C196	ECBT1H102KB5	50V 1000P [M]
C201, 202	ECBT1H180J5	50V 18P [M]
C219-226	ECBT1H101KB5	50V 100P [M]
C229-234	ECBT1H101KB5	50V 100P [M]
C235, 236	ECBT1H104ZF5	50V 0.1U [M]
C301	ECBT1H102KB5	50V 1000P [M]
C302, 303	ECBT1H561KB5	50V 560P [M]
C309	ECEA1HKAR22B	50V 0.22U [M]
C310	ECFR1C393KR	16V 0.039U [M]
C312	ECFR1C823MR	16V 0.082U [M]
C313	ECFR1C103KR	16V 0.01U [M]
C315	ECFR1C223KR	16V 0.022U [M]
C316	ECBT1C332KR5	16V 3300P [M]
C318	ECBT1C682KR5	16V 6800P [M]
C319	ECBT1H102KB5	50V 1000P [M]
C320	ECBA1H681KB5	50V 680P [M]
C321	ECBT1C332KR5	16V 3300P [M]
C322	ECQV1H333JM3	50V 0.033U [M]
C324	ECFR1C683KR	16V 0.068U [M]
C325	ECQV1H154JM3	50V 0.15U [M]
C326	ECBT1H102KB5	50V 1000P [M]
C327	ECBT1H471KB5	50V 470P [M]
C328	RCE1CKA470BG	16V 47U [M]
C329	ECEA1HKA2R2B	50V 2.2U [M]
C330	ECBA1H681KB5	50V 680P [M]
C331	ECBT1H104ZF5	50V 0.1U [M]
C332-334	ECBT1H470J5	50V 47P [M]
C336	ECBT1H104ZF5	50V 0.1U [M]
C337	RCE1CKA470BG	16V 47U [M]
C338	ECBT1H471KB5	50V 470P [M]
C339	ECBT1H102KB5	50V 1000P [M]
C340	ECQV1H154JM3	50V 0.15U [M]
C341	ECFR1C683KR	16V 0.068U [M]
C342	ECQV1H333JM3	50V 0.033U [M]
C343	ECEA1HKA2R2B	50V 2.2U [M]
C344	ECBT1C332KR5	16V 3300P [M]
C346	ECBT1H102KB5	50V 1000P [M]
C347	ECBT1C682KR5	16V 6800P [M]
C349	ECBT1C332KR5	16V 3300P [M]
C350	ECFR1C223KR	16V 0.022U [M]
C352	ECFR1C103KR	16V 0.01U [M]
C353	ECFR1C823MR	16V 0.082U [M]
C355	ECFR1C393KR	16V 0.039U [M]
C356	ECEA1HKAR22B	50V 0.22U [M]
C357, 358	ECQV1H683JM3	50V 0.068U [M]
C359	RCE1HKA3R3BG	50V 3.3U [M]
C360	RCE1HKA4R7BG	50V 4.7U [M]
C364	ECBT1C152KR5	16V 1500P [M]
C365	ECQV1H154JM3	50V 0.15U [M]
C372	ECBT1H104ZF5	50V 0.1U [M]
C385, 386	ECEA1HKAR22B	50V 0.22U [M]
C395, 396	ECBT1H473ZF5	50V 0.047U [M]
C501-506	ECBT1H101KB5	50V 100P [M]
C507, 508	RCE1CKA100BG	16V 10U [M]
C509-512	ECBT1E103ZF	25V 0.01U [M]
C513, 514	ECBT1C103KS5	16V 0.01U [M]
C551	ECEA1HKA2R2B	50V 2.2U [M]
C552	ECBT1E103ZF	25V 0.01U [M]

Ref. No.	Part No.	Values & Remarks
C553	ECEA1HKAR68B	50V 0.68U [M]
C554	ECEA1AKA221B	10V 220U [M]
C557, 558	ECFR1C393KR	16V 0.039U [M]
C604, 605	RCE1CKA100BG	16V 10U [M]
C607, 608	ECBT1C122KR5	16V 1200P [M]
C613, 614	ECBT1H150JC5	50V 15P [M]
C615	ECEA2AU010	100V 1U [M]
C616	ECA1JM330B	63V 33U [M]
C617	ECEA1HN2R2	50V 2.2U [M]
C618	ECA1HM101B	50V 100U [M]
C620, 621	ECQV1H473JM3	50V 0.047U [M]
C631, 632	ECBT1H102KB5	50V 1000P [M]
C633	ECBT1C103KS5	16V 0.01U [M]
C655	ECEA2AU3R3B	100V 3.3U [M]
C656	ECBT1E103ZF	25V 0.01U [M]
C657	ECBT1H104ZF5	50V 0.1U [M]
C701, 702⚠	ECA1VM472E	35V 4700U [M]
C703, 704⚠	ECA1VM332E	35V 3300U [M]
C705	RCE1CKA100BG	16V 10U [M]
C706	RCE1VKA100BG	35V 10U [M]
C707	ECBT1E103ZF	25V 0.01U [M]
C708	RCE1CKA100BG	16V 10U [M]
C709	ECBT1H104ZF5	50V 0.1U [M]
C710	ECBT1E103ZF	25V 0.01U [M]
C711	RCE1EM471BV	25V 470U [M]
C714	ECBT1H102KB5	50V 1000P [M]
C715⚠	ECA1EM472E	25V 4700U [M]
C717	ECEA1CKA330B	16V 33U [M]
C718	RCE1AKA101BG	10V 100U [M]
C719, 720	ECBT1E103ZF	25V 0.01U [M]
C721	RCE1AKA101BG	10V 100U [M]
C723	ECBT1E103ZF	25V 0.01U [M]
C725	RCE1CKA100BG	16V 10U [M]
C726	ECBT1E103ZF	25V 0.01U [M]
C731	ECBT1H102KB5	50V 1000P [M]
C732	ECBT1E223ZF	25V 0.022U [M]
C734	RCE1CKA100BG	16V 10U [M]
C736⚠	ECA1EM101B	25V 100U [M]
C737, 738⚠	ECA1HM101B	50V 100U [M]
C739⚠	ECA1JM101B	63V 100U [M]
C740	RCE1CKA100BG	16V 10U [M]
C741	ECBT1H104ZF5	50V 0.1U [M]
C901	ECBT1H104ZF5	50V 0.1U [M]
C902	ECA0JM102B	6.3V 1000U [M]
C903	ECBT1E103ZF	25V 0.01U [M]
C905-908	ECBT1H471KB5	50V 470P [M]
C909	ECBT1H102KB5	50V 1000P [M]
C910	ECBT1H150JC5	50V 15P [M]
C911	ECBT1H180JC5	50V 18P [M]
C912	ECBT1H104ZF5	50V 0.1U [M]
C913	RCE1CKA100BG	16V 10U [M]
C914	ECEA1HKA2R2B	50V 2.2U [M]

Ref. No.	Part No.	Values & Remarks
C915	ECBT1E103ZF	25V 0.01U [M]
C916	ECA0JKF101B	6.3V 100U [M]
C917	ECBT1E103ZF	25V 0.01U [M]
C918	ECEA0JKA221B	6.3V 220U [M]
C919, 920	ECEA1HKS2R2B	50V 2.2U [M]
C921	ECBT1H102KB5	50V 1000P [M]
C922	ECEA1VKA330B	35V 33U [M]
C1101, 1102	ECBT1H473ZF5	50V 0.047U [M]
C1103-1106	ECBT1H102KB5	50V 1000P [M]

■ Replacement Parts List (Electrical) [For (EG) and (EP) areas]

Notes: *Important safety notice:
Components identified by ⚠ mark have special characteristics important for safety.
Furthermore, special parts which have purposes of fire-retardant (resistors), high-quality sound (capacitors), low-noise (resistors), etc. are used.
When replacing any of components, be sure to use only manufacture's specified parts shown in the parts list.
*The parenthesized indications in the Remarks columns specify the areas. (Refer to the cover page for area.)
Parts without these indications can be used for all areas.
*[M] Indicates in Remarks columns parts that are supplied by MESA.

Ref. No.	Part No.	Part Name & Description	Remarks
		INTEGRATED CIRCUIT(S)	
IC101	LA1832MH-TEL	IC	[M]
IC102	LC7218M-TE-L	IC	[M]
IC151	LA2230M-TE-L	IC	[M]
IC301	M62433FP	IC	[M]
IC501	M5218AP	IC	[M]
IC601⚠	RSN308M24	IC	[M]
IC901	M38198MC097F	IC	[M]
		TRANSISTOR(S)	
Q101, 102	2SC2787L	TRANSISTOR	[M]
Q103, 104	2SC2785FE	TRANSISTOR	[M]
Q106	UN4111	TRANSISTOR	[M]
Q107, 108	2SC3311AR	TRANSISTOR	[M]
Q110	2SC3311AR	TRANSISTOR	[M]
Q305, 306	2SC3311AIRTA	TRANSISTOR	[M]
Q307, 308	2SD2144S	TRANSISTOR	[M]
Q309, 310	UN4115	TRANSISTOR	[M]
Q503	2SD1450RTA	TRANSISTOR	[M]
Q551	2SA1309AIRTA	TRANSISTOR	[M]
Q554	2SA1309AIRTA	TRANSISTOR	[M]
Q555	2SD2144S	TRANSISTOR	[M]
Q558	2SD2144S	TRANSISTOR	[M]
Q605	2SC3311AIRTA	TRANSISTOR	[M]
Q651⚠	2SB1238QRTV6	TRANSISTOR	[M]
Q652	2SD1859QRTV2	TRANSISTOR	[M]
Q654	2SD1859QRTV2	TRANSISTOR	[M]
Q656	2SC3311AIRTA	TRANSISTOR	[M]
Q701⚠	2SD2374PQAU	TRANSISTOR	[M]
Q702⚠	2SB1548PQAU	TRANSISTOR	[M]
Q703⚠	2SD2374PQAU	TRANSISTOR	[M]
Q704	UN4211	TRANSISTOR	[M]
Q707⚠	2SB621A-R	TRANSISTOR	[M]
Q708⚠	2SD2137PQTA	TRANSISTOR	[M]
Q709	2SD2144S	TRANSISTOR	[M]
Q711	2SB1417PQTA	TRANSISTOR	[M]
Q712⚠	2SB1548PQAU	TRANSISTOR	[M]
Q718	UN4111	TRANSISTOR	[M]
Q719, 720	2SD1450RTA	TRANSISTOR	[M]
Q721	2SC3311AIRTA	TRANSISTOR	[M]
Q722	2SA1309AIRTA	TRANSISTOR	[M]
Q723⚠	2SC3940AQSTA	TRANSISTOR	[M]
Q724	UN4211	TRANSISTOR	[M]
Q725⚠	2SC3311AIRTA	TRANSISTOR	[M]
Q901	UN4214TA	TRANSISTOR	[M]
Q902-904	2SC3311AIRTA	TRANSISTOR	[M]
Q905, 906	UN411FTA	TRANSISTOR	[M]
		DIODE(S)	
D101⚠	MA4051MTA	DIODE	[M]
D102	MA165	DIODE	[M]
D151	MA4051MTA	DIODE	[M]
D152	MA165	DIODE	[M]
D331	MA4051-L	DIODE	[M]
D551, 552	MA165	DIODE	[M]
D555	MA4100MTA	DIODE	[M]
D558	MA165	DIODE	[M]
D601, 602	SB360L6508	DIODE	[M]
D651⚠	MA4200M	DIODE	[M]
D652, 653⚠	MA4140M	DIODE	[M]
D657, 658	MA165	DIODE	[M]
D701-704⚠	1N5402BF	DIODE	[M]
D705-708⚠	RL1N4003N02	DIODE	[M]
D709	MA165	DIODE	[M]
D710	MA4051MTA	DIODE	[M]
D711	RL1N4003N02	DIODE	[M]
D713, 714⚠	MA185TA	DIODE	[M]
D715	MA165	DIODE	[M]
D717-720⚠	RL1N4003N02	DIODE	[M]
D721⚠	MA4300M	DIODE	[M]
D723⚠	MA4150M	DIODE	[M]
D724, 725⚠	MA4082LTA	DIODE	[M]
D727⚠	MA4062-H	DIODE	[M]
D730⚠	MA4100MTA	DIODE	[M]
D732-736	MA165	DIODE	[M]
D737⚠	MA4082LTA	DIODE	[M]
D738, 739	MA165	DIODE	[M]
D751, 752⚠	1N5402BF	DIODE	[M]
D753, 754⚠	RL1N4003N02	DIODE	[M]
D901, 902	1SS291TA	DIODE	[M]
D903, 904	MA165	DIODE	[M]
D905	1SS291TA	DIODE	[M]
D906, 907	MA165	DIODE	[M]
D908	SPR505MDTT	L. E. D.	[M]
D909	MA165	DIODE	[M]
D931	MA165	DIODE	[M]
D933, 934	MA165	DIODE	[M]
D936	MA165	DIODE	[M]

Ref. No.	Part No.	Part Name & Description	Remarks
D943	MA165	DIODE	[M]
D971, 972	MA165	DIODE	[M]
D973	MA4039MTA	DIODE	[M]
		VARIABLE RESISTOR(S)	
VR151	EVNDCBA03B53	V. R	[M]
VR901	EVQVBXFK124B	V. R	[M]
		COMPONENT COMBINATION(S)	
Z101	RLA2Z002M-T	COMPONENT COMBINATION	[M]
Z102	RLI2Z006M-T	COMPONENT COMBINATION	[M]
Z120	RALD019	FM FRONT END	[M]
Z901	RCDGP1U28XD	COMPONENT COMBINATION	[M]
		COIL(S)	
L101	ELESNR68MA	COIL	[M]
L103	ELEXTR47MA9	COIL	[M]
L104	ELEXT1R0KA9	COIL	[M]
L105, 106	ELELN822KL	COIL	[M]
L151	SLM1B10M-1M	COIL	[M]
L161	ELEXT101KA9	COIL	[M]
L191	ELESNR68MA	COIL	[M]
L601, 602	SLQY07G-40	COIL	[M]
L701⚠	RLQZ271M-K	COIL	[M]
L901	RLQA100JT-Y	COIL	[M]
		TRANSFORMER(S)	
T501⚠	RTP2N5B009	POWER TRANSFORMER	[M]
		FILTER(S)	
CF201	RLFFETNGD01L	CERAMIC FILTER	[M]
CF202	RLFFETMGD01L	CERAMIC FILTER	[M]
		OSCILLATOR(S)	
X101	RSXZ456KM07M	OSCILLATOR	[M]
X102	RLFDGT05DD	OSCILLATOR	[M]
X103	RSXC7M20S05T	OSCILLATOR	[M]
X151	RSXZ456KM07M	OSCILLATOR	[M]
X901	EF0EC6004T4	OSCILLATOR	[M]
X902	RSXD32K7S02	OSCILLATOR	[M]
		DISPLAY TUBE	
FL901	RSL0234-F	DISPLAY TUBE	[M]
		FUSE(S)	

Ref. No.	Part No.	Part Name & Description	Remarks
F1⚠	XBA2C12TB0	FUSE	[M]
		SWITCH(ES)	
S901-914	EVQ21405R	SW	[M]
		CONNECTOR(S)	
CN201	RJU057W010	CONNECTOR(10P)	[M]
CN203	RJU057W012	CONNECTOR(12P)	[M]
CN701-709	RJS1A1101T1	CONNECTOR(1P)	[M]
CN711-713	RJS1A1101T1	CONNECTOR(1P)	[M]
CN715	RJU057W012	CONNECTOR(12P)	[M]
CN721	RJS9T5ZA	CONNECTOR(9P)	[M]
CN904	RJS2A2105	CONNECTOR(5P)	[M]
CN101B	RJU057W007	CONNECTOR(7P)	[M]
CN102B	RJU057W007	CONNECTOR(7P)	[M]
CN501B	RJU057W007	CONNECTOR(7P)	[M]
CP103B	RJT057W007-1	CONNECTOR(7P)	[M]
CP201	RJT057W010-1	CONNECTOR(10P)	[M]
CP203	RJT057W012-1	CONNECTOR(12P)	[M]
CP715	RJT057W012-1	CONNECTOR(12P)	[M]
CP101B	RJT057W007-1	CONNECTOR(7P)	[M]
CP102B	RJT057W007-1	CONNECTOR(7P)	[M]
		EARTH TERMINAL(S)	
E601	SNE1004-2	EARTH TERMINAL	[M]
E603	SNE1004-2	EARTH TERMINAL	[M]
		FUSE HOLDER(S)	
FC1, 2	EYF52BC	FUSE HOLDER	[M]
		RELAY(S)	
RL701⚠	RSY0030-C	RELAY	[M]
		JACK(S)	
JK101	RJH5210M	ANTENNA	[M]
JK201	RJT065K19	SYSTEM	[M]
JK203	SJF3068-7N	EXT IN	[M]
JK204	SJF3069-5N	PHONO/EXT OUT	[M]
JK501	RJR0054M	SPEAKERS	[M]
JK701⚠	SJS9236	AC INLET	[M]
JK903	RJJ37TN01-C	HEADPHONES	[M]
		FUSE(S)	
F1⚠	XBA2C12TB0S	FUSE	[M]

■ Resistors and Capacitors [For (EG) and (EP) areas]

Notes : * Capacity values are in microfarads (uF) unless specified otherwise, P=Pico-farads(pF) F=Farads(F)
* Resistance values are in ohms, unless specified otherwise, 1K=1,000(OHM) , 1M=1,000k(OHM)

Ref. No.	Part No.	Values & Remarks
		RESISTORS
R103	ERDS2TJ101	1/4W 100 [M]
R104	ERDS2TJ103	1/4W 10K [M]
R105	ERDS2TJ471	1/4W 470 [M]
R106	ERDS2TJ474	1/4W 470K [M]
R107	ERDS2TJ331	1/4W 330 [M]
R108	ERDS2TJ474	1/4W 470K [M]
R109	ERDS2TJ331	1/4W 330 [M]
R110	ERDS2TJ102	1/4W 1K [M]
R112	ERDS2TJ104	1/4W 100K [M]
R113	ERDS2TJ103	1/4W 10K [M]
R114	ERDS2TJ562	1/4W 5.6K [M]
R115	ERDS2TJ561	1/4W 560 [M]
R116	ERDS2TJ102	1/4W 1K [M]
R117	ERDS2TJ823T	1/4W 82K [M]
R118	ERDS2TJ472	1/4W 4.7K [M]
R119	ERDS2TJ103	1/4W 10K [M]
R120	ERDS2TJ473	1/4W 47K [M]
R121	ERDS2TJ332	1/4W 3.3K [M]
R122	ERDS2TJ272T	1/4W 2.7K [M]
R124	ERDS2TJ271	1/4W 270 [M]
R125, 126	ERDS2TJ152	1/4W 1.5K [M]
R127	ERDS2TJ103	1/4W 10K [M]
R128	ERDS2TJ820	1/4W 82 [M]
R129	ERDS2TJ473	1/4W 47K [M]
R130	ERDS2TJ103	1/4W 10K [M]
R132	ERDS2TJ103	1/4W 10K [M]
R133-137	ERDS2TJ102	1/4W 1K [M]
R138	ERDS2TJ103	1/4W 10K [M]
R139, 140	ERDS2TJ272T	1/4W 2.7K [M]
R141, 142	ERDS2TJ102	1/4W 1K [M]
R143, 144	ERDS2TJ222	1/4W 2.2K [M]
R145, 146	ERDS2TJ821	1/4W 820 [M]
R147, 148	ERDS2TJ474	1/4W 470K [M]
R149	ERDS2TJ680T	1/4W 68 [M]
R151	ERDS2TJ564	1/4W 560K [M]
R152	ERDS2TJ102	1/4W 1K [M]
R153	ERDS2TJ155	1/4W 1.5M [M]
R154	ERDS2TJ102	1/4W 1K [M]
R155	ERDS2TJ562	1/4W 5.6K [M]
R156	ERDS2TJ471	1/4W 470 [M]
R157	ERDS2TJ820	1/4W 82 [M]
R158	ERDS2TJ103	1/4W 10K [M]
R159	ERDS2TJ104	1/4W 100K [M]
R160, 161	ERDS2TJ102	1/4W 1K [M]
R162	ERDS2TJ103	1/4W 10K [M]
R163	ERDS2TJ223	1/4W 22K [M]
R164	ERDS2TJ332	1/4W 3.3K [M]
R171, 172	ERDS2TJ102	1/4W 1K [M]
R173	ERDS2TJ471	1/4W 470 [M]
R175	ERDS2TJ102	1/4W 1K [M]
R176	ERDS2TJ391	1/4W 390 [M]
R177	ERDS2TJ472	1/4W 4.7K [M]
R201, 202⚠	ERDS2FJ752	1/4W 7.5K [M]
R217, 218	ERDS2TJ562	1/4W 5.6K [M]
R221, 222	ERDS2FJ752	1/4W 7.5K [M]
R223, 224	ERDS2TJ562	1/4W 5.6K [M]
R225, 226	ERDS2TJ104	1/4W 100K [M]
R227, 228	ERDS2TJ222	1/4W 2.2K [M]
R229, 230	ERDS2TJ822	1/4W 8.2K [M]
R231-234	ERDS2TJ682T	1/4W 6.8K [M]
R235, 236	ERDS2TJ102	1/4W 1K [M]
R239-242	ERDS2TJ102	1/4W 1K [M]
R243, 244	ERDS2TJ152	1/4W 1.5K [M]
R245, 246	ERDS2TJ332	1/4W 3.3K [M]
R249, 250	ERDS2TJ101	1/4W 100 [M]
R251	ERDS2TJ222	1/4W 2.2K [M]
R253, 254	ERDS2TJ104	1/4W 100K [M]
R255, 256	ERDS2TJ123	1/4W 12K [M]
R257, 258	ERDS2TJ562	1/4W 5.6K [M]
R261, 262⚠	ERD25FVJ1R0T	1/4W 1.0 [M]
R301	ERDS2TJ223	1/4W 22K [M]
R302	ERDS2TJ472	1/4W 4.7K [M]
R303, 304	ERDS2TJ222	1/4W 2.2K [M]
R305, 306	ERDS2TJ152	1/4W 1.5K [M]
R307, 308	ERDS2TJ104	1/4W 100K [M]
R309, 310	ERDS2TJ102	1/4W 1K [M]
R311, 312	ERDS2TJ104	1/4W 100K [M]
R313, 314	ERDS2EJ121	1/4W 120 [M]
R315	ERDS2TJ104	1/4W 100K [M]
R316	ERDS2TJ222	1/4W 2.2K [M]
R317	ERDS2TJ105T	1/4W 1M [M]
R318	ERDS2TJ153	1/4W 15K [M]
R324	ERDS2TJ223	1/4W 22K [M]
R326	ERDS2TJ332	1/4W 3.3K [M]
R327	ERDS2TJ392T	1/4W 3.9K [M]
R328	ERDS2TJ332	1/4W 3.3K [M]
R329	ERDS2TJ103	1/4W 10K [M]
R330	ERDS2TJ332	1/4W 3.3K [M]
R331	ERDS2TJ102	1/4W 1K [M]
R332-334	ERDS2TJ222	1/4W 2.2K [M]
R335, 336	ERDS2TJ683	1/4W 68K [M]
R338	ERDS2TJ392T	1/4W 3.9K [M]
R343	ERDS2TJ334	1/4W 330K [M]
R360	ERDS2TJ223	1/4W 22K [M]
R364	ERDS2TJ103	1/4W 10K [M]
R365	ERDS2TJ223	1/4W 22K [M]
R380	ERDS2TJ153	1/4W 15K [M]
R503, 504	ERDS2TJ333	1/4W 33K [M]
R505, 506	ERDS2TJ153	1/4W 15K [M]
R507, 508	ERDS2TJ332	1/4W 3.3K [M]
R509-512	ERDS2TJ560T	1/4W 56 [M]
R513, 514	ERDS2TJ103	1/4W 10K
R551	ERDS2TJ183T	1/4W 18K [M]
R552	ERDS2TJ473	1/4W 47K [M]
R555	ERDS2TJ223	1/4W 22K [M]
R556	ERDS2TJ104	1/4W 100K [M]
R557	ERDS2TJ103	1/4W 10K [M]
R558	ERDS2TJ102	1/4W 1K [M]
R559	ERDS2TJ472	1/4W 4.7K [M]
R561	ERDS2TJ104	1/4W 100K [M]
R562	ERDS2TJ102	1/4W 1K [M]
R563	ERDS2TJ332	1/4W 3.3K [M]
R564	ERDS2TJ273	1/4W 27K [M]
R570	ERDS2TJ335T	1/4W 3.3M [M]
R591	ERDS2TJ473	1/4W 47K [M]
R604, 605	ERDS2TJ103	1/4W 10K [M]
R619, 620	ERDS2TJ563	1/4W 56K [M]
R623	ERDS2TJ684	1/4W 680K [M]
R624	ERDS2TJ223	1/4W 22K [M]
R628	ERDS2TJ184T	1/4W 180K [M]
R629, 630	ERDS2TJ100	1/4W 10 [M]
R631	ERDS2TJ224T	1/4W 220K [M]
R632, 633	ERDS2TJ563	1/4W 56K [M]
R637	ERDS2TJ154	1/4W 150K [M]
R638	ERDS2TJ684	1/4W 680K [M]
R639-642⚠	ERDS1FJ100	1/2W 10 [M]
R647, 648	ERQ16NKWR15E	1/6W 0.15 [M]
R651	ERDS2TJ222	1/4W 2.2K [M]
R654	ERDS2TJ222	1/4W 2.2K [M]
R655, 656	ERDS2TJ183T	1/4W 18K [M]
R667	ERDS2TJ331	1/4W 330 [M]
R701, 702	ERDS2TJ273	1/4W 27K [M]
R703, 704	ERDS2TJ101	1/4W 100 [M]
R707⚠	ERD25FVJ4R7T	1/4W 4.7 [M]
R708	ERDS2TJ472	1/4W 4.7K [M]
R712	ERDS2TJ152	1/4W 1.5K [M]
R713, 714	ERDS2TJ332	1/4W 3.3K [M]
R715	ERDS2TJ183T	1/4W 18K [M]
R717	ERDS2TJ473	1/4W 47K [M]
R721⚠	ERD2FCJ4R7	1/4W 4.7 [M]
R722⚠	ERQ16NKW2R2E	1/6W 2.2 [M]
R723	ERDS2TJ562	1/4W 5.6K [M]
R724	ERDS2TJ152	1/4W 1.5K [M]
R725, 726	ERDS2TJ100	1/4W 10 [M]

Ref. No.	Part No.	Values & Remarks
R727	ERDS2TJ152	1/4W 1.5K [M]
R729	ERDS2TJ221	1/4W 220 [M]
R735⚠	ERD25FVJ4R7T	1/4W 4.7 [M]
R736	ERDS2TJ102	1/4W 1K [M]
R737	ERDS2TJ221	1/4W 220 [M]
R738	ERDS2TJ392T	1/4W 3.9K [M]
R739	ERDS2TJ473	1/4W 47K [M]
R748	ERDS2TJ102	1/4W 1K [M]
R749	ERDS2TJ271	1/4W 270 [M]
R755⚠	ERDS1FVJ8R2T	1/2W 8.2 [M]
R756⚠	ERDS1FJ4R7	1/2W 4.7 [M]
R757-759	ERDS2TJ103	1/4W 10K [M]
R761, 762	ERDS2TJ822	1/4W 8.2K [M]
R763	ERDS2TJ472	1/4W 4.7K [M]
R764	ERDS2TJ331	1/4W 330 [M]
R765⚠	ERDS1FVJ561T	1/2W 560 [M]
R766	ERDS2TJ102	1/4W 1K [M]
R767⚠	ERD2FCJ4R7	1/4W 4.7 [M]
R768	ERDS2TJ101	1/4W 100 [M]
R791, 792⚠	RSFMB30KT-L	PROTECTOR [M]
R901	ERDS2TJ821	1/4W 820 [M]
R902	ERDS2TJ102	1/4W 1K [M]
R903	ERDS2TJ122	1/4W 1.2K [M]
R904	ERDS2TJ152	1/4W 1.5K [M]
R905	ERDS2TJ182	1/4W 1.8K [M]
R906	ERDS2TJ222	1/4W 2.2K [M]
R907	ERDS2TJ272T	1/4W 2.7K [M]
R908	ERDS2TJ472	1/4W 4.7K [M]
R909	ERDS2TJ682T	1/4W 6.8K [M]
R910	ERDS2TJ123	1/4W 12K [M]
R911	ERDS2TJ223	1/4W 22K [M]
R912	ERDS2TJ821	1/4W 820 [M]
R919-923	ERDS2TJ103	1/4W 10K [M]
R924-927	ERDS2TJ102	1/4W 1K [M]
R929	ERDS2TJ102	1/4W 1K [M]
R930	ERDS2TJ101	1/4W 100 [M]
R931-936	ERDS2TJ102	1/4W 1K [M]
R937	ERDS2TJ562	1/4W 5.6K [M]
R938	ERDS2TJ102	1/4W 1K [M]
R939	ERDS2TJ152	1/4W 1.5K [M]
R940, 941	ERDS2TJ102	1/4W 1K [M]
R942	ERDS2TJ101	1/4W 100 [M]
R943	ERDS2TJ102	1/4W 1K [M]
R946	ERDS2TJ102	1/4W 1K [M]
R949	ERDS2TJ472	1/4W 4.7K [M]
R950	ERDS2TJ101	1/4W 100 [M]
R951	ERDS2TJ334	1/4W 330K [M]
R952	ERDS2TJ106T	1/4W 10M [M]
R953	ERDS2TJ101	1/4W 100 [M]
R954	ERDS2TJ104	1/4W 100K [M]
R955	ERDS2TJ824	1/4W 820K [M]
R956-958	ERDS2TJ102	1/4W 1K [M]

Ref. No.	Part No.	Values & Remarks
R959	ERDS2TJ471	1/4W 470 [M]
R960	ERDS2TJ152	1/4W 1.5K [M]
R961, 962	ERDS2TJ223	1/4W 22K [M]
R963, 964	ERDS2TJ103	1/4W 10K [M]
R965	ERDS2TJ472	1/4W 4.7K [M]
R966	ERDS2TJ103	1/4W 10K [M]
R967	ERDS2TJ473	1/4W 47K [M]
R968	ERDS2TJ103	1/4W 10K [M]
R969, 970	ERDS2TJ472	1/4W 4.7K [M]
R971	ERDS2TJ473	1/4W 47K [M]
R972	ERDS2TJ223	1/4W 22K [M]
R974	ERDS2TJ101	1/4W 100 [M]
R975	ERDS2TJ181T	1/4W 180 [M]
R977-981	ERDS2TJ104	1/4W 100K [M]
R984, 985	ERDS2TJ473	1/4W 47K [M]
R986-988	ERDS2TJ102	1/4W 1K [M]
R989, 990	ERDS2TJ393	1/4W 39K [M]
R991	ERDS2TJ473	1/4W 47K [M]
R993, 994	ERDS2TJ104	1/4W 100K [M]
R996, 997	ERDS2TJ151	1/4W 150 [M]
		CAPACITORS
C101	ECBT1C103NS5	16V 0.01U [M]
C103	ECBT1C103NS5	16V 0.01U [M]
C104, 105	ECBT1H102KB5	50V 1000P [M]
C106	ECBT1C103NS5	16V 0.01U [M]
C107	ECBT1H473ZF5	50V 0.047U [M]
C108	ECBT1H8R2KC5	50V 8.2P [M]
C109, 110	ECBT1C103NS5	16V 0.01U [M]
C111	ECEA1EKA4R7B	25V 4.7U [M]
C112	ECBT1C103NS5	16V 0.01U [M]
C113	ECBT1H102KB5	50V 1000P [M]
C114	RCE1HKA3R3BG	50V 3.3U [M]
C115	ECEA1EKA4R7B	25V 4.7U [M]
C116	ECBT1C822KS5	16V 8200P [M]
C117	ECQP1391JZ	100V 390P [M]
C118, 119	ECFR1C103KR	16V 0.01U [M]
C120, 121	ECEA1HKA010B	50V 1U [M]
C122	ECEA1HKA2R2B	50V 2.2U [M]
C123	ECEA1HKA010B	50V 1U [M]
C124	ECBT1H102KB5	50V 1000P [M]
C125	ECBT1H150JC5	50V 15P [M]
C126	ECBT1H473ZF5	50V 0.047U [M]
C127	ECEA1CKA220B	16V 22U [M]
C128	ECBT1H102KB5	50V 1000P [M]
C129, 130	ECEA0JKA101B	6.3V 100U [M]
C132	ECBT1H102KB5	50V 1000P [M]
C133, 134	ECBT1H270JU5	50V 27P [M]
C135, 136	ECBT1C103KS5	16V 0.01U [M]
C137, 138	ECBT1H561KB5	50V 560P [M]
C139, 140	ECBT1C682KR5	16V 6800P [M]

Ref. No.	Part No.	Values & Remarks
C141-144	ECEA1HKA010B	50V 1U [M]
C145	ECBT1H220JC5	50V 22P [M]
C148	ECBT1C103NS5	16V 0.01U [M]
C149	ECBT1H104ZF5	50V 0.1U [M]
C151	ECEA0JKA101B	6.3V 100U [M]
C152	ECEA1CKA220B	16V 22U [M]
C153, 154	ECBT1C332KR5	16V 3300P [M]
C155	ECBT1C103KS5	16V 0.01U [M]
C156	ECBT1H102KB5	50V 1000P [M]
C157	RCE1CKA100BG	16V 10U [M]
C158	ECEA1EKA4R7B	25V 4.7U [M]
C159	RCE1CKA100BG	16V 10U [M]
C160	ECFR1C223KR	16V 0.022U [M]
C161	ECFR1C333KR	16V 0.033U [M]
C162	ECBT1C682KR5	16V 6800P [M]
C163	ECFR1C333KR	16V 0.033U [M]
C164	ECBT1H102KB5	50V 1000P [M]
C165	ECEA1EKA4R7B	25V 4.7U [M]
C171, 172	ECBT1H102KB5	50V 1000P [M]
C173	ECEA1CKA220B	16V 22U [M]
C174	RCE1CKA100BG	16V 10U [M]
C181	ECBT1H471KB5	50V 470P [M]
C196	ECBT1H102KB5	50V 1000P [M]
C201, 202	ECBT1H180J5	50V 18P [M]
C219-226	ECBT1H101KB5	50V 100P [M]
C229-234	ECBT1H101KB5	50V 100P [M]
C235, 236	ECBT1H104ZF5	50V 0.1U [M]
C301	ECBT1H102KB5	50V 1000P [M]
C302, 303	ECBT1H561KB5	50V 560P [M]
C309	ECEA1HKAR22B	50V 0.22U [M]
C310	ECFR1C393KR	16V 0.039U [M]
C312	ECFR1C823MR	16V 0.082U [M]
C313	ECFR1C103KR	16V 0.01U [M]
C315	ECFR1C223KR	16V 0.022U [M]
C316	ECBT1C332KR5	16V 3300P [M]
C318	ECBT1C682KR5	16V 6800P [M]
C319	ECBT1H102KB5	50V 1000P [M]
C320	ECBA1H681KB5	50V 680P [M]
C321	ECBT1C332KR5	16V 3300P [M]
C322	ECQV1H333JM3	50V 0.033U [M]
C324	ECFR1C683KR	16V 0.068U [M]
C325	ECQV1H154JM3	50V 0.15U [M]
C326	ECBT1H102KB5	50V 1000P [M]
C327	ECBT1H471KB5	50V 470P [M]
C328	RCE1CKA470BG	16V 47U [M]
C329	ECEA1HKA2R2B	50V 2.2U [M]
C330	ECBA1H681KB5	50V 680P [M]
C331	ECBT1H104ZF5	50V 0.1U [M]
C332-334	ECBT1H470J5	50V 47P [M]
C336	ECBT1H104ZF5	50V 0.1U [M]
C337	RCE1CKA470BG	16V 47U [M]
C338	ECBT1H471KB5	50V 470P [M]

Ref. No.	Part No.	Values & Remarks
C339	ECBT1H102KB5	50V 1000P [M]
C340	ECQV1H154JM3	50V 0.15U [M]
C341	ECFR1C683KR	16V 0.068U [M]
C342	ECQV1H333JM3	50V 0.033U [M]
C343	ECEA1HKA2R2B	50V 2.2U [M]
C344	ECBT1C332KR5	16V 3300P [M]
C346	ECBT1H102KB5	50V 1000P [M]
C347	ECBT1C682KR5	16V 6800P [M]
C349	ECBT1C332KR5	16V 3300P [M]
C350	ECFR1C223KR	16V 0.022U [M]
C352	ECFR1C103KR	16V 0.01U [M]
C353	ECFR1C823MR	16V 0.082U [M]
C355	ECFR1C393KR	16V 0.039U [M]
C356	ECEA1HKAR22B	50V 0.22U [M]
C357, 358	ECQV1H683JM3	50V 0.068U [M]
C359	RCE1HKA3R3BG	50V 3.3U [M]
C360	RCE1HKA4R7BG	50V 4.7U [M]
C364	ECBT1C152KR5	16V 1500P [M]
C365	ECQV1H154JM3	50V 0.15U [M]
C372	ECBT1H104ZF5	50V 0.1U [M]
C385, 386	ECEA1HKAR22B	50V 0.22U [M]
C395, 396	ECBT1H473ZF5	50V 0.047U [M]
C501-506	ECBT1H101KB5	50V 100P [M]
C507, 508	RCE1CKA100BG	16V 10U [M]
C509-512	ECBT1E103ZF	25V 0.01U [M]
C551	ECEA1HKA2R2B	50V 2.2U [M]
C552	ECBT1E103ZF	25V 0.01U [M]
C553	ECEA1HKAR68B	50V 0.68U [M]
C554	ECA1AM221B	10V 220U [M]
C557, 558	ECFR1C393KR	16V 0.039U [M]
C604, 605	RCE1CKA100BG	16V 10U [M]
C607, 608	ECBT1C122KR5	16V 1200P [M]
C613, 614	ECBT1H150JC5	50V 15P [M]
C615	ECEA2AU010	100V 1U [M]
C616	ECA1JM330B	63V 33U [M]
C617	ECEA1HKNR47B	50V 0.47U [M]
C618	ECA1HM101B	50V 100U [M]
C620, 621	ECQV1H473JM3	50V 0.047U [M]
C631, 632	ECBT1H102KB5	50V 1000P [M]
C633	ECBT1C103KS5	16V 0.01U [M]
C655	ECEA2AU3R3B	100V 3.3U [M]
C656	ECBT1E103ZF	25V 0.01U [M]
C657	ECBT1H104ZF5	50V 0.1U [M]
C701, 702⚠	ECA1VM472E	35V 4700U [M]
C703, 704⚠	ECA1VM332E	35V 3300U [M]
C705	RCE1CKA100BG	16V 10U [M]
C706	RCE1VKA100BG	35V 10U [M]
C707	ECBT1E103ZF	25V 0.01U [M]
C708	RCE1CKA100BG	16V 10U [M]
C709	ECBT1H104ZF5	50V 0.1U [M]
C710	ECBT1E103ZF	25V 0.01U [M]
C711	RCE1EM471BV	25V 470U [M]

Ref. No.	Part No.	Values & Remarks
C714	ECBT1H102KB5	50V 1000P [M]
C715⚠	ECA1EM472E	25V 4700U [M]
C717	ECEA1CKA330B	16V 33U [M]
C718	RCE1AKA101BG	10V 100U [M]
C719, 720	ECBT1E103ZF	25V 0.01U [M]
C721	RCE1AKA101BG	10V 100U [M]
C723	ECBT1E103ZF	25V 0.01U [M]
C725	RCE1CKA100BG	16V 10U [M]
C726	ECBT1E103ZF	25V 0.01U [M]
C731	ECBT1H102KB5	50V 1000P [M]
C732	ECBT1E223ZF	25V 0.022U [M]
C734	RCE1CKA100BG	16V 10U [M]
C736⚠	ECA1EM101B	25V 100U [M]
C737, 738⚠	ECA1HM101B	50V 100U [M]
C739⚠	ECA1JM101B	63V 100U [M]
C740	RCE1CKA100BG	16V 10U [M]
C741	ECBT1H104ZF5	50V 0.1U [M]
C901	ECBT1H104ZF5	50V 0.1U [M]
C902	ECA0JM102B	6.3V 1000U [M]
C903	ECBT1E103ZF	25V 0.01U [M]
C905-908	ECBT1H471KB5	50V 470P [M]
C909	ECBT1H102KB5	50V 1000P [M]
C910	ECBT1H150JC5	50V 15P [M]
C911	ECBT1H180JC5	50V 18P [M]
C912	ECBT1H104ZF5	50V 0.1U [M]
C913	RCE1CKA100BG	16V 10U [M]
C914	ECEA1HKA2R2B	50V 2.2U [M]
C915	ECBT1E103ZF	25V 0.01U [M]
C916	ECA0JKF101B	6.3V 100U [M]
C917	ECBT1E103ZF	25V 0.01U [M]
C918	ECEA0JKA221B	6.3V 220U [M]
C919, 920	ECEA1HKS2R2B	50V 2.2U [M]
C921	ECBT1H102KB5	50V 1000P [M]
C922	ECEA1VKA330B	35V 33U [M]
C1101, 1102	ECBT1H473ZF5	50V 0.047U [M]
C1103-1106	ECBT1H102KB5	50V 1000P [M]

■ Replacement Parts List (Electrical) [For (GC) area]

Notes: *Important safety notice:
Components identified by ⚠ mark have special characteristics important for safety.
Furthermore, special parts which have purposes of fire-retardant (resistors), high-quality sound (capacitors), low-noise (resistors), etc. are used.
When replacing any of components, be sure to use only manufacture's specified parts shown in the parts list.
*The parenthesized indications in the Remarks columns specify the areas. (Refer to the cover page for area.)
Parts without these indications can be used for all areas.
*[M] Indicates in Remarks columns parts that are supplied by MESA.

Ref. No.	Part No.	Part Name & Description	Remarks
		INTEGRATED CIRCUIT (S)	
IC101	LA1832MH-TEL	IC	[M]
IC102	LC7218M-TE-L	IC	[M]
IC301	M62433FP	IC	[M]
IC401	TA2011S	IC	[M]
IC402	BU9255FS-E2	IC	[M]
IC501	M5218AP	IC	[M]
IC601⚠	RSN307M42	IC	[M]
IC801	LV1030	IC	[M]
IC803	M62425FPE1	IC	[M]
IC901	M38198MC099F	IC	[M]
		TRANSISTOR (S)	
Q101, 102	2SC2787L	TRANSISTOR	[M]
Q103, 104	2SC2785FE	TRANSISTOR	[M]
Q106	UN411FTA	TRANSISTOR	[M]
Q107, 108	2SC3311AR	TRANSISTOR	[M]
Q301	2SD2144S	TRANSISTOR	[M]
Q305, 306	2SC3311AIRTA	TRANSISTOR	[M]
Q307, 308	2SD2144S	TRANSISTOR	[M]
Q309, 310	UN4115	TRANSISTOR	[M]
Q401	2SC3311AIRTA	TRANSISTOR	[M]
Q503	2SD1450RTA	TRANSISTOR	[M]
Q551	2SA1309AIRTA	TRANSISTOR	[M]
Q553	2SD2144S	TRANSISTOR	[M]
Q554	2SA1309AIRTA	TRANSISTOR	[M]
Q555	2SD2144S	TRANSISTOR	[M]
Q556	2SC3311AIRTA	TRANSISTOR	[M]
Q557	2SA1309AIRTA	TRANSISTOR	[M]
Q558	2SD2144S	TRANSISTOR	[M]
Q603-605	2SC3311AIRTA	TRANSISTOR	[M]
Q656	2SC3311AIRTA	TRANSISTOR	[M]
Q701⚠	2SD2374PQAU	TRANSISTOR	[M]
Q702⚠	2SB1548PQAU	TRANSISTOR	[M]
Q703⚠	2SD2374PQAU	TRANSISTOR	[M]
Q704	UN4211	TRANSISTOR	[M]
Q707⚠	2SB621A-R	TRANSISTOR	[M]
Q708⚠	2SD2137PQTA	TRANSISTOR	[M]
Q709	2SD2144S	TRANSISTOR	[M]
Q711	2SB1417PQTA	TRANSISTOR	[M]
Q712⚠	2SB1548PQAU	TRANSISTOR	[M]
Q718	UN4111	TRANSISTOR	[M]
Q719, 720	2SD1450RTA	TRANSISTOR	[M]

Ref. No.	Part No.	Part Name & Description	Remarks
Q721	2SC3311AIRTA	TRANSISTOR	[M]
Q722	2SA1309AIRTA	TRANSISTOR	[M]
Q723⚠	2SC3940AQSTA	TRANSISTOR	[M]
Q724	UN4211	TRANSISTOR	[M]
Q725⚠	2SC3311AIRTA	TRANSISTOR	[M]
Q801, 802	2SD1450RTA	TRANSISTOR	[M]
Q803, 804	UN4115	TRANSISTOR	[M]
Q805, 806	2SD1450RTA	TRANSISTOR	[M]
Q807	UN4115	TRANSISTOR	[M]
Q811, 812⚠	2SD2137PQTA	TRANSISTOR	[M]
Q901	UN4214TA	TRANSISTOR	[M]
Q902-904	2SC3311AIRTA	TRANSISTOR	[M]
Q905, 906	UN411FTA	TRANSISTOR	[M]
		DIODE (S)	
D101⚠	MA4051MTA	DIODE	[M]
D102	MA165	DIODE	[M]
D303	MA165	DIODE	[M]
D331	MA4051-L	DIODE	[M]
D401	MA165	DIODE	[M]
D402	MA4051MTA	DIODE	[M]
D551, 552	MA165	DIODE	[M]
D553	MA700TA	DIODE	[M]
D554	MA165	DIODE	[M]
D555	MA4100MTA	DIODE	[M]
D557, 558	MA165	DIODE	[M]
D559, 560	MA4020LTA	DIODE	[M]
D601, 602	SB360L6508	DIODE	[M]
D657, 658	MA165	DIODE	[M]
D701-704⚠	1N5402BF	DIODE	[M]
D705-708⚠	RL1N4003N02	DIODE	[M]
D709	MA165	DIODE	[M]
D710	MA4051MTA	DIODE	[M]
D711	RL1N4003N02	DIODE	[M]
D713, 714⚠	MA185TA	DIODE	[M]
D715	MA165	DIODE	[M]
D717-720⚠	RL1N4003N02	DIODE	[M]
D721⚠	MA4300M	DIODE	[M]
D723⚠	MA4150M	DIODE	[M]
D724, 725⚠	MA4082LTA	DIODE	[M]
D727⚠	MA4062-H	DIODE	[M]
D730⚠	MA4100MTA	DIODE	[M]
D732-736	MA165	DIODE	[M]
D737⚠	MA4082LTA	DIODE	[M]
D738, 739	MA165	DIODE	[M]

Ref. No.	Part No.	Part Name & Description	Remarks
D751, 752⚠	1N5402BF	DIODE	[M]
D753, 754⚠	RL1N4003N02	DIODE	[M]
D801-804	MA165	DIODE	[M]
D808⚠	MA4120	DIODE	[M]
D901, 902	1SS291TA	DIODE	[M]
D903, 904	MA165	DIODE	[M]
D905	1SS291TA	DIODE	[M]
D906, 907	MA165	DIODE	[M]
D908	SPR505MDTT	L. E. D.	[M]
D909	MA165	DIODE	[M]
D931	MA165	DIODE	[M]
D934	MA165	DIODE	[M]
D935-937	MA165	DIODE	[M]
D943	MA165	DIODE	[M]
D971, 972	MA165	DIODE	[M]
D973	MA4039MTA	DIODE	[M]
		VARIABLE RESISTOR(S)	
VR401	EVUE27FK3B53	V. R	[M]
VR901	EVQVBXFK124B	V. R	[M]
		COMPONENT COMBINATION(S)	
Z101	RLA2Z002M-T	COMPONENT COMBINATION	[M]
Z102	RLI2Z006M-T	COMPONENT COMBINATION	[M]
Z120	RAL0006	FM FRONT END	[M]
Z901	RCDGP1U28XD	COMPONENT COMBINATION	[M]
		COIL(S)	
L101	ELESNR68MA	COIL	[M]
L103	ELEXTR47MA9	COIL	[M]
L105, 106	ELELN822KL	COIL	[M]
L191	ELESNR68MA	COIL	[M]
L601-604	SLQY07G-40	COIL	[M]
L801	RLQA100JT-Y	COIL	[M]
L901	RLQA100JT-Y	COIL	[M]
		TRANSFORMER(S)	
T501⚠	RTP2M5E011	POWER TRANSFORMER	[M]
		FILTER(S)	
CF201, 202	RLFFETWND01M	CERAMIC FILTER	[M]
		OSCILLATOR(S)	
X101	RSXZ456KM07M	OSCILLATOR	[M]
X102	RLFDGT05DD	OSCILLATOR	[M]
X103	RSXC7M20S05T	OSCILLATOR	[M]

Ref. No.	Part No.	Part Name & Description	Remarks
X801	EF0EC8004T4	OSCILLATOR	[M]
X901	EF0EC6004T4	OSCILLATOR	[M]
X902	RSXD32K7S02	OSCILLATOR	[M]
		DISPLAY TUBE	
FL901	RSL0234-F	DISPLAY TUBE	[M]
		FUSE(S)	
F1⚠	XBA2C12TB0S	FUSE, T2A	[M]
F2⚠	XBA2C25TB0	FUSE, T1A	[M]
		SWITCH(ES)	
S701⚠	ESE37314	SW	[M]
S901-914	EVQ21405R	SW	[M]
		CONNECTOR(S)	
CN201	RJU057W010	CONNECTOR(10P)	[M]
CN203	RJU057W012	CONNECTOR(12P)	[M]
CN701-709	RJS1A1101T1	CONNECTOR(1P)	[M]
CN711-715	RJS1A1101T1	CONNECTOR(1P)	[M]
CN715A	RJU057W012	CONNECTOR(12P)	[M]
CN716-719	RJS1A1101T1	CONNECTOR(1P)	[M]
CN720A	RJP1A4103	CONNECTOR(2P)	[M]
CN720	RJS1A1101T1	CONNECTOR(1P)	[M]
CN721	RJS9T5ZA	CONNECTOR(9P)	[M]
CN801	RJU057W009	CONNECTOR(9P)	[M]
CN802	RJU057W008	CONNECTOR(8P)	[M]
CN904, 905	RJS2A2105	CONNECTOR(5P)	[M]
CN101B	RJU057W007	CONNECTOR(7P)	[M]
CN102B	RJU057W007	CONNECTOR(7P)	[M]
CP201	RJT057W010-1	CONNECTOR(10P)	[M]
CP203	RJT057W012-1	CONNECTOR(12P)	[M]
CP715	RJT057W012-1	CONNECTOR(12P)	[M]
CP801	RJT057W009-1	CONNECTOR(9P)	[M]
CP802	RJT057W008-1	CONNECTOR(8P)	[M]
CP101B	RJT057W007-1	CONNECTOR(7P)	[M]
CP102B	RJT057W007-1	CONNECTOR(7P)	[M]
		EARTH TERMINAL(S)	
E601	SNE1004-2	EARTH TERMINAL	[M]
E603	SNE1004-2	EARTH TERMINAL	[M]
		FUSE HOLDER(S)	
FC1-4	EYF52BC	FUSE HOLDER	[M]
		RELAY(S)	

Ref. No.	Part No.	Part Name & Description	Remarks
RL701⚠	RSY0030-C	RELAY	[M]
		JACK(S)	
JK101	RJH5404M	ANTENNA	[M]
JK201	RJT065K19	SYSTEM	[M]
JK203	SJF3068-7N	EXT IN	[M]
JK204	SJF3069-5N	PHONO/EXT OUT	[M]
JK501	RJR0054M	SPEAKERS	[M]
JK502	RJH2305	SURROUND/CENTER SPEAKERS	[M]
JK551	SJT3213	FAN MOTOR	[M]
JK701⚠	SJS9236	AC INLET	[M]
JK901	RJJ65MA01	MIC 1	[M]
JK902	RJJ65MA01	MIC 2	[M]
JK903	RJJ37TN01-C	HEADPHONES	[M]

■ Resistors and Capacitors [For (GC) area]

Notes : * Capacity values are in microfarads (uF) unless specified otherwise, P=Pico-farads(pF) F=Farads(F)
* Resistance values are in ohms, unless specified otherwise, 1K=1,000(OHM) , 1M=1,000k(OHM)

Ref. No.	Part No.	Values & Remarks
		RESISTORS
R103	ERDS2TJ271	1/4W 270 [M]
R104	ERDS2TJ822	1/4W 8.2K [M]
R105	ERDS2TJ471	1/4W 470 [M]
R106	ERDS2TJ474	1/4W 470K [M]
R107	ERDS2TJ331	1/4W 330 [M]
R108	ERDS2TJ474	1/4W 470K [M]
R109	ERDS2TJ331	1/4W 330 [M]
R110	ERDS2TJ102	1/4W 1K [M]
R112	ERDS2TJ104	1/4W 100K [M]
R113	ERDS2TJ103	1/4W 10K [M]
R114	ERDS2TJ562	1/4W 5.6K [M]
R115	ERDS2TJ561	1/4W 560 [M]
R116	ERDS2TJ102	1/4W 1K [M]
R117	ERDS2TJ273	1/4W 27K [M]
R118	ERDS2TJ562	1/4W 5.6K [M]
R119	ERDS2TJ682T	1/4W 6.8K [M]
R120	ERDS2TJ473	1/4W 47K [M]
R121	ERDS2TJ332	1/4W 3.3K [M]
R122	ERDS2TJ272T	1/4W 2.7K [M]
R124	ERDS2TJ271	1/4W 270 [M]
R125, 126	ERDS2TJ152	1/4W 1.5K [M]
R127	ERDS2TJ103	1/4W 10K [M]
R128	ERDS2TJ820	1/4W 82 [M]
R129	ERDS2TJ473	1/4W 47K [M]
R130	ERDS2TJ103	1/4W 10K [M]
R132	ERDS2TJ103	1/4W 10K [M]
R133-137	ERDS2TJ102	1/4W 1K [M]
R138	ERDS2TJ103	1/4W 10K [M]
R139, 140	ERDS2TJ272T	1/4W 2.7K [M]
R141, 142	ERDS2TJ102	1/4W 1K [M]
R143, 144	ERDS2TJ222	1/4W 2.2K [M]
R145, 146	ERDS2TJ102	1/4W 1K [M]
R147, 148	ERDS2TJ474	1/4W 470K [M]
R149	ERDS2TJ680T	1/4W 68 [M]
R171, 172	ERDS2TJ102	1/4W 1K [M]
R173	ERDS2TJ471	1/4W 470 [M]
R175	ERDS2TJ102	1/4W 1K [M]
R176	ERDS2TJ391	1/4W 390 [M]
R201, 202⚠	ERDS2FJ752	1/4W 7.5K [M]
R217, 218	ERDS2TJ562	1/4W 5.6K [M]
R221, 222	ERDS2FJ752	1/4W 7.5K [M]
R223, 224	ERDS2TJ562	1/4W 5.6K [M]
R225, 226	ERDS2TJ104	1/4W 100K [M]
R227, 228	ERDS2TJ222	1/4W 2.2K [M]
R229, 230	ERDS2TJ822	1/4W 8.2K [M]
R231-234	ERDS2TJ682T	1/4W 6.8K [M]

Ref. No.	Part No.	Values & Remarks
R235, 236	ERDS2TJ102	1/4W 1K [M]
R239-242	ERDS2TJ102	1/4W 1K [M]
R243, 244	ERDS2TJ152	1/4W 1.5K [M]
R245, 246	ERDS2TJ332	1/4W 3.3K [M]
R249, 250	ERDS2TJ101	1/4W 100 [M]
R251	ERDS2TJ222	1/4W 2.2K [M]
R253, 254	ERDS2TJ104	1/4W 100K [M]
R255, 256	ERDS2TJ123	1/4W 12K [M]
R257, 258	ERDS2TJ562	1/4W 5.6K [M]
R261, 262⚠	ERD25FVJ1R0T	1/4W 1.0 [M]
R301	ERDS2TJ223	1/4W 22K [M]
R302	ERDS2TJ472	1/4W 4.7K [M]
R303, 304	ERDS2TJ222	1/4W 2.2K [M]
R305, 306	ERDS2TJ122	1/4W 1.2K [M]
R307, 308	ERDS2TJ104	1/4W 100K [M]
R309, 310	ERDS2TJ102	1/4W 1K [M]
R311, 312	ERDS2TJ104	1/4W 100K [M]
R313, 314	ERDS2EJ121	1/4W 120 [M]
R315	ERDS2TJ104	1/4W 100K [M]
R316	ERDS2TJ222	1/4W 2.2K [M]
R317	ERDS2TJ105T	1/4W 1M [M]
R318	ERDS2TJ153	1/4W 15K [M]
R319	ERDS2TJ472	1/4W 4.7K [M]
R321	ERDS2TJ104	1/4W 100K [M]
R322	ERDS2TJ222	1/4W 2.2K [M]
R324	ERDS2TJ223	1/4W 22K [M]
R326	ERDS2TJ332	1/4W 3.3K [M]
R327	ERDS2TJ392T	1/4W 3.9K [M]
R328	ERDS2TJ332	1/4W 3.3K [M]
R329	ERDS2TJ103	1/4W 10K [M]
R330	ERDS2TJ332	1/4W 3.3K [M]
R331	ERDS2TJ102	1/4W 1K [M]
R332-334	ERDS2TJ222	1/4W 2.2K [M]
R335, 336	ERDS2TJ683	1/4W 68K [M]
R338	ERDS2TJ392T	1/4W 3.9K [M]
R341, 342	ERDS2TJ222	1/4W 2.2K [M]
R343	ERDS2TJ334	1/4W 330K [M]
R353	ERDS2TJ104	1/4W 100K [M]
R354	ERDS2TJ223	1/4W 22K [M]
R360	ERDS2TJ223	1/4W 22K [M]
R364	ERDS2TJ103	1/4W 10K [M]
R365	ERDS2TJ223	1/4W 22K [M]
R380	ERDS2TJ153	1/4W 15K [M]
R401, 402	ERDS2TJ681	1/4W 680 [M]
R403	ERDS2TJ223	1/4W 22K [M]
R404	ERDS2TJ471	1/4W 470 [M]
R405	ERDS2TJ472	1/4W 4.7K [M]
R406	ERDS2TJ474	1/4W 470K [M]
R407	ERDS2TJ472	1/4W 4.7K [M]

Ref. No.	Part No.	Values & Remarks
R409	ERDS2TJ472	1/4W 4.7K [M]
R410	ERDS2TJ222	1/4W 2.2K [M]
R411	ERDS2TJ331	1/4W 330 [M]
R412	ERDS2TJ105T	1/4W 1M [M]
R415	ERDS2TJ102	1/4W 1K [M]
R416	ERDS2TJ181T	1/4W 180 [M]
R421	ERDS2TJ223	1/4W 22K [M]
R450	ERDS2TJ682T	1/4W 6.8K [M]
R451, 452	ERDS2TJ223	1/4W 22K [M]
R453	ERDS2TJ1R0	1/4W 1.0 [M]
R454	ERDS2TJ103	1/4W 10K [M]
R455	ERDS2TJ223	1/4W 22K [M]
R456	ERDS2EJ121	1/4W 120 [M]
R457	ERDS2TJ822	1/4W 8.2K [M]
R458	ERDS2TJ123	1/4W 12K [M]
R459	ERDS2TJ472	1/4W 4.7K [M]
R460	ERDS2TJ153	1/4W 15K [M]
R461	ERDS2TJ472	1/4W 4.7K [M]
R462	ERDS2TJ103	1/4W 10K [M]
R463	ERDS2TJ223	1/4W 22K [M]
R464	ERDS2TJ103	1/4W 10K [M]
R465	ERDS2TJ104	1/4W 100K [M]
R503, 504	ERDS2TJ333	1/4W 33K [M]
R505, 506	ERDS2TJ153	1/4W 15K [M]
R507, 508	ERDS2TJ332	1/4W 3.3K [M]
R509-512	ERDS2TJ560T	1/4W 56 [M]
R513, 514	ERDS2TJ103	1/4W 10K [M]
R521	ERDS2TJ561	1/4W 560 [M]
R551	ERDS2TJ183T	1/4W 18K [M]
R552	ERDS2TJ473	1/4W 47K [M]
R555	ERDS2TJ223	1/4W 22K [M]
R556	ERDS2TJ104	1/4W 100K [M]
R557	ERDS2TJ472	1/4W 4.7K [M]
R558	ERDS2TJ102	1/4W 1K [M]
R559	ERDS2TJ472	1/4W 4.7K [M]
R560, 561	ERDS2TJ104	1/4W 100K [M]
R563, 564	ERDS2TJ273	1/4W 27K [M]
R566	ERDS2TJ683	1/4W 68K [M]
R567	ERG1SJ220	1W 22 [M]
R568	ERDS2TJ101	1/4W 100 [M]
R569	ERDS2TJ103	1/4W 10K [M]
R570	ERDS2TJ225	1/4W 2.2M [M]
R591	ERDS2TJ473	1/4W 47K [M]
R602, 603	ERDS2TJ221	1/4W 220 [M]
R604, 605	ERDS2TJ103	1/4W 10K [M]
R609, 610	ERDS2TJ563	1/4W 56K [M]
R611, 612	ERDS2TJ332	1/4W 3.3K [M]
R613	ERDS2TJ104	1/4W 100K [M]
R614	ERDS2TJ124T	1/4W 120K [M]

Ref. No.	Part No.	Values & Remarks
R615, 616	ERDS2TJ182	1/4W 1.8K [M]
R619, 620	ERDS2TJ563	1/4W 56K [M]
R621	ERDS2TJ273	1/4W 27K [M]
R622	ERDS2TJ473	1/4W 47K [M]
R623	ERDS2TJ684	1/4W 680K [M]
R624	ERDS2TJ223	1/4W 22K [M]
R626	ERDS2TJ154	1/4W 150K [M]
R627	ERDS2TJ124T	1/4W 120K [M]
R628	ERDS2TJ184T	1/4W 180K [M]
R629	ERDS2TJ104	1/4W 100K [M]
R630	ERDS2TJ473	1/4W 47K [M]
R631	ERDS2TJ224T	1/4W 220K [M]
R637	ERDS2TJ154	1/4W 150K [M]
R638	ERDS2TJ684	1/4W 680K [M]
R639-646⚠	ERDS1FVJ100T	1/2W 10 [M]
R647, 648	ERQ16NKWR15E	1/6W 0.15 [M]
R655-658	ERDS2TJ183T	1/4W 18K [M]
R701, 702	ERDS2TJ273	1/4W 27K [M]
R703, 704	ERDS2TJ101	1/4W 100 [M]
R707⚠	ERD25FVJ4R7T	1/4W 4.7 [M]
R708	ERDS2TJ472	1/4W 4.7K [M]
R712	ERDS2TJ152	1/4W 1.5K [M]
R713, 714	ERDS2TJ332	1/4W 3.3K [M]
R715	ERDS2TJ183T	1/4W 18K [M]
R717	ERDS2TJ473	1/4W 47K [M]
R721⚠	ERD2FCVJ4R7T	1/4W 4.7 [M]
R722⚠	ERQ16NKW2R2E	1/6W 2.2 [M]
R723	ERDS2TJ562	1/4W 5.6K [M]
R724	ERDS2TJ152	1/4W 1.5K [M]
R725, 726	ERDS2TJ100	1/4W 10 [M]
R727	ERDS2TJ152	1/4W 1.5K [M]
R729	ERDS2TJ221	1/4W 220 [M]
R735⚠	ERD25FVJ4R7T	1/4W 4.7 [M]
R736	ERDS2TJ102	1/4W 1K [M]
R737	ERDS2TJ221	1/4W 220 [M]
R738	ERDS2TJ392T	1/4W 3.9K [M]
R739	ERDS2TJ473	1/4W 47K [M]
R748	ERDS2TJ102	1/4W 1K [M]
R749	ERDS2TJ271	1/4W 270 [M]
R755⚠	ERDS1FVJ8R2T	1/2W 8.2 [M]
R756⚠	ERDS1FJ4R7	1/2W 4.7 [M]
R757-759	ERDS2TJ103	1/4W 10K [M]
R761, 762	ERDS2TJ822	1/4W 8.2K [M]
R763	ERDS2TJ472	1/4W 4.7K [M]
R764	ERDS2TJ331	1/4W 330 [M]
R765⚠	ERDS1FVJ561T	1/2W 560 [M]
R766	ERDS2TJ102	1/4W 1K [M]
R767⚠	ERD2FCVJ4R7T	1/4W 4.7 [M]
R768	ERDS2TJ101	1/4W 100 [M]
R791, 792⚠	RSFMB30KT-L	PROTECTOR [M]
R801, 802	ERDS2TJ393	1/4W 39K [M]
R808	ERDS2TJ104	1/4W 100K [M]

Ref. No.	Part No.	Values & Remarks
R819	ERDS2TJ393	1/4W 39K [M]
R822	ERDS2TJ102	1/4W 1K [M]
R823	ERDS2TJ105T	1/4W 1M [M]
R825-827	ERDS2TJ332	1/4W 3.3K [M]
R835, 836	ERDS2TJ222	1/4W 2.2K [M]
R837, 838	ERDS2TJ182	1/4W 1.8K [M]
R842	ERDS2TJ104	1/4W 100K [M]
R843, 844	ERDS2TJ222	1/4W 2.2K [M]
R845	ERDS2TJ104	1/4W 100K [M]
R846	ERDS2TJ102	1/4W 1K [M]
R847, 848	ERDS2TJ472	1/4W 4.7K [M]
R849	ERDS2TJ102	1/4W 1K [M]
R850	ERDS2TJ222	1/4W 2.2K [M]
R851	ERDS2TJ473	1/4W 47K [M]
R852	ERDS2TJ393	1/4W 39K [M]
R853	ERDS2TJ473	1/4W 47K [M]
R854	ERDS2TJ393	1/4W 39K [M]
R855	ERDS2TJ104	1/4W 100K [M]
R856, 857	ERDS2TJ123	1/4W 12K [M]
R859, 860	ERDS2EJ121	1/4W 120 [M]
R861	ERDS2TJ105T	1/4W 1M [M]
R862	ERDS2TJ472	1/4W 4.7K [M]
R863, 864	ERDS2TJ105T	1/4W 1M [M]
R865	ERDS2TJ102	1/4W 1K [M]
R866, 867	ERDS2TJ222	1/4W 2.2K [M]
R868-870	ERDS2TJ102	1/4W 1K [M]
R871, 872	ERDS2TJ4R7T	1/4W 4.7 [M]
R873⚠	ERD2FCVJ4R7T	1/4W 4.7 [M]
R874	ERDS2TJ104	1/4W 100K [M]
R875	ERDS2TJ102	1/4W 1K [M]
R891	ERDS2TJ331	1/4W 330 [M]
R901	ERDS2TJ821	1/4W 820 [M]
R902	ERDS2TJ102	1/4W 1K [M]
R903	ERDS2TJ122	1/4W 1.2K [M]
R904	ERDS2TJ152	1/4W 1.5K [M]
R905	ERDS2TJ182	1/4W 1.8K [M]
R906	ERDS2TJ222	1/4W 2.2K [M]
R907	ERDS2TJ272T	1/4W 2.7K [M]
R908	ERDS2TJ472	1/4W 4.7K [M]
R909	ERDS2TJ682T	1/4W 6.8K [M]
R910	ERDS2TJ123	1/4W 12K [M]
R911	ERDS2TJ223	1/4W 22K [M]
R912	ERDS2TJ821	1/4W 820 [M]
R919-923	ERDS2TJ103	1/4W 10K [M]
R924-927	ERDS2TJ102	1/4W 1K [M]
R929	ERDS2TJ102	1/4W 1K [M]
R930	ERDS2TJ101	1/4W 100 [M]
R931-936	ERDS2TJ102	1/4W 1K [M]
R937	ERDS2TJ562	1/4W 5.6K [M]
R938	ERDS2TJ102	1/4W 1K [M]
R939	ERDS2TJ152	1/4W 1.5K [M]
R940, 941	ERDS2TJ102	1/4W 1K [M]

Ref. No.	Part No.	Values & Remarks
R942	ERDS2TJ101	1/4W 100 [M]
R943	ERDS2TJ102	1/4W 1K [M]
R946	ERDS2TJ102	1/4W 1K [M]
R947, 948	ERDS2TJ104	1/4W 100K [M]
R949	ERDS2TJ472	1/4W 4.7K [M]
R950	ERDS2TJ101	1/4W 100 [M]
R951	ERDS2TJ334	1/4W 330K [M]
R952	ERDS2TJ106T	1/4W 10M [M]
R953	ERDS2TJ101	1/4W 100 [M]
R954	ERDS2TJ104	1/4W 100K [M]
R955	ERDS2TJ824	1/4W 820K [M]
R956-958	ERDS2TJ102	1/4W 1K [M]
R959	ERDS2TJ471	1/4W 470 [M]
R960	ERDS2TJ152	1/4W 1.5K [M]
R961, 962	ERDS2TJ223	1/4W 22K [M]
R963, 964	ERDS2TJ103	1/4W 10K [M]
R965	ERDS2TJ472	1/4W 4.7K [M]
R966	ERDS2TJ103	1/4W 10K [M]
R967	ERDS2TJ473	1/4W 47K [M]
R968	ERDS2TJ103	1/4W 10K [M]
R969, 970	ERDS2TJ472	1/4W 4.7K [M]
R971	ERDS2TJ473	1/4W 47K [M]
R972	ERDS2TJ223	1/4W 22K [M]
R974	ERDS2TJ101	1/4W 100 [M]
R975	ERDS2TJ181T	1/4W 180 [M]
R977-981	ERDS2TJ104	1/4W 100K [M]
R984, 985	ERDS2TJ473	1/4W 47K [M]
R986-988	ERDS2TJ102	1/4W 1K [M]
R989, 990	ERDS2TJ393	1/4W 39K [M]
R991	ERDS2TJ473	1/4W 47K [M]
R993, 994	ERDS2TJ104	1/4W 100K [M]
R996, 997	ERDS2TJ151	1/4W 150 [M]
		CAPACITORS
C101	ECBT1C103NS5	16V 0.01U [M]
C103	ECBT1C103NS5	16V 0.01U [M]
C104, 105	ECBT1H102KB5	50V 1000P [M]
C106	ECBT1C103NS5	16V 0.01U [M]
C107	ECBT1H473ZF5	50V 0.047U [M]
C108	ECBT1H8R2KC5	50V 8.2P [M]
C109, 110	ECBT1C103NS5	16V 0.01U [M]
C111	ECEA1EKA4R7B	25V 4.7U [M]
C112	ECBT1C103NS5	16V 0.01U [M]
C113	ECBT1H102KB5	50V 1000P [M]
C114	RCE1HKA3R3BG	50V 3.3U [M]
C115	ECEA1EKA4R7B	25V 4.7U [M]
C116	ECBT1C822KS5	16V 8200P [M]
C117	ECQB1H102JF3	50V 1000P [M]
C118, 119	ECFR1C103KR	16V 0.01U [M]
C120, 121	ECEA1HKA010B	50V 1U [M]
C122	ECEA1HKA2R2B	50V 2.2U [M]

Ref. No.	Part No.	Values & Remarks
C123	ECEA1HKA010B	50V 1U [M]
C124	ECBT1H102KB5	50V 1000P [M]
C125	ECBT1H150JC5	50V 15P [M]
C126	ECBT1H473ZF5	50V 0.047U [M]
C127	ECEA1CKA220B	16V 22U [M]
C128	ECBT1H102KB5	50V 1000P [M]
C129, 130	ECEA0JKA101B	6.3V 100U [M]
C132	ECBT1H102KB5	50V 1000P [M]
C133, 134	ECBT1H270JU5	50V 27P [M]
C135, 136	ECBT1C103KS5	16V 0.01U [M]
C137, 138	ECBT1H561KB5	50V 560P [M]
C139, 140	ECBT1C562KR5	16V 5600P [M]
C141-144	ECEA1HKA010B	50V 1U [M]
C145	ECBT1H220JC5	50V 22P [M]
C148	ECBT1C103NS5	16V 0.01U [M]
C149	ECBT1H104ZF5	50V 0.1U [M]
C171, 172	ECBT1H102KB5	50V 1000P [M]
C173	ECEA1CKA220B	16V 22U [M]
C174	RCE1CKA100BG	16V 10U [M]
C196	ECBT1H102KB5	50V 1000P [M]
C201, 202	ECBT1H180J5	50V 18P [M]
C219-226	ECBT1H101KB5	50V 100P [M]
C229-234	ECBT1H101KB5	50V 100P [M]
C235, 236	ECBT1H104ZF5	50V 0.1U [M]
C301	ECBT1H102KB5	50V 1000P [M]
C302, 303	ECBT1H561KB5	50V 560P [M]
C309	ECEA1HKAR22B	50V 0.22U [M]
C310	ECFR1C393KR	16V 0.039U [M]
C312	ECFR1C823MR	16V 0.082U [M]
C313	ECFR1C103KR	16V 0.01U [M]
C315	ECFR1C223KR	16V 0.022U [M]
C316	ECBT1C332KR5	16V 3300P [M]
C318	ECBT1C682KR5	16V 6800P [M]
C319	ECBT1H102KB5	50V 1000P [M]
C320	ECBA1H681KB5	50V 680P [M]
C321	ECBT1C332KR5	16V 3300P [M]
C322	ECQV1H333JM3	50V 0.033U [M]
C324	ECFR1C683KR	16V 0.068U [M]
C325	ECQV1H154JM3	50V 0.15U [M]
C326	ECBT1H102KB5	50V 1000P [M]
C327	ECBT1H471KB5	50V 470P [M]
C328	RCE1CKA470BG	16V 47U [M]
C329	ECEA1HKA2R2B	50V 2.2U [M]
C330	ECBA1H681KB5	50V 680P [M]
C331	ECBT1H104ZF5	50V 0.1U [M]
C332-334	ECBT1H470J5	50V 47P [M]
C336	ECBT1H104ZF5	50V 0.1U [M]
C337	RCE1CKA470BG	16V 47U [M]
C338	ECBT1H471KB5	50V 470P [M]
C339	ECBT1H102KB5	50V 1000P [M]
C340	ECQV1H154JM3	50V 0.15U [M]
C341	ECFR1C683KR	16V 0.068U [M]
C342	ECQV1H333JM3	50V 0.033U [M]
C343	ECEA1HKA2R2B	50V 2.2U [M]
C344	ECBT1C332KR5	16V 3300P [M]
C346	ECBT1H102KB5	50V 1000P [M]
C347	ECBT1C682KR5	16V 6800P [M]
C348	RCE1CKA100BG	16V 10U [M]
C349	ECBT1C332KR5	16V 3300P [M]
C350	ECFR1C223KR	16V 0.022U [M]
C352	ECFR1C103KR	16V 0.01U [M]
C353	ECFR1C823MR	16V 0.082U [M]
C354	ECEA1CN100SB	16V 10U [M]
C355	ECFR1C393KR	16V 0.039U [M]
C356	ECEA1HKAR22B	50V 0.22U [M]
C357, 358	ECQV1H683JM3	50V 0.068U [M]
C359	RCE1HKA3R3BG	50V 3.3U [M]
C360	RCE1HKA4R7BG	50V 4.7U [M]
C361, 362	ECBT1C222KR5	16V 2200P [M]
C364	ECBT1C152KR5	16V 1500P [M]
C365	ECQV1H154JM3	50V 0.15U [M]
C371	ECEA0JKA101B	6.3V 100U [M]
C372	ECBT1H104ZF5	50V 0.1U [M]
C385, 386	ECEA1HKAR22B	50V 0.22U [M]
C395, 396	ECBT1H473ZF5	50V 0.047U [M]
C401	ECBT1H102KB5	50V 1000P [M]
C403	ECBT1H102KB5	50V 1000P [M]
C404	RCE1HKA3R3BG	50V 3.3U [M]
C405	ECBT1H471KB5	50V 470P [M]
C406	ECEA1EU4R7	25V 4.7U [M]
C407	ECBT1E103ZF	25V 0.01U [M]
C408	ECBT1C103MS5	16V 0.01U [M]
C409	ECEA1HKA010B	50V 1U [M]
C410	ECEA1CKS100L	16V 10U [M]
C411	ECBT1H101KB5	50V 100P [M]
C412	ECBT1H102KB5	50V 1000P [M]
C413	ECEA1HKA010B	50V 1U [M]
C414	ECEA1AKA221B	10V 220U [M]
C415	ECEA1HKA010B	50V 1U [M]
C416	RCE1CKA100BG	16V 10U [M]
C417	ECBT1C472KR5	16V 4700P [M]
C418	ECBT1H221KB5	50V 220P [M]
C419	RCE1CKA100BG	16V 10U [M]
C420	ECBT1H104ZF5	50V 0.1U [M]
C421	RCE1AKA101BG	10V 100U [M]
C422	ECBT1C103KS5	16V 0.01U [M]
C424	ECBT1C103KS5	16V 0.01U [M]
C425	ECBT1C332MR5	16V 3300P [M]
C426	ECEA1HKA010B	50V 1U [M]
C427	ECBT0J223MS5	6.3V 0.022U [M]
C428	ECEA1HKA010B	50V 1U [M]
C429	ECBT1C472MR5	16V 4700P [M]
C430	ECBT1C103KS5	16V 0.01U [M]
C431	ECEA1HKNR47B	50V 0.47U [M]
C432	ECBT0J223MS5	6.3V 0.022U [M]
C433	RCE1CKA470BG	16V 47U [M]
C434	RCE1CKA100BG	16V 10U [M]
C441	ECBT1E103ZF	25V 0.01U [M]
C501-506	ECBT1H101KB5	50V 100P [M]
C507, 508	RCE1CKA100BG	16V 10U [M]
C509-512	ECBT1E103ZF	25V 0.01U [M]
C513, 514	ECBT1C103KS5	16V 0.01U [M]
C551	ECEA1HKA2R2B	50V 2.2U [M]
C552	ECBT1E103ZF	25V 0.01U [M]
C554	ECA1AM221B	10V 220U [M]
C555, 556	ECEA1CKN100B	16V 10U [M]
C557, 558	ECFR1C393KR	16V 0.039U [M]
C559	ECBT1E103ZF	25V 0.01U [M]
C602-605	RCE1CKA100BG	16V 10U [M]
C607-610	ECBT1H471KB5	50V 470P [M]
C611-614	ECBT1H150JC5	50V 15P [M]
C615	ECEA2AU010	100V 1U [M]
C616	ECA1JM330B	63V 33U [M]
C617	ECEA1HN2R2	50V 2.2U [M]
C618	ECA1HM101B	50V 100U [M]
C620, 621	ECQV1H473JM3	50V 0.047U [M]
C624, 625	ECQV1H473JM3	50V 0.047U [M]
C628, 629	RCE1CKA100BG	16V 10U [M]
C701⚠	ECA1VM472E	35V 4700U [M]
C702⚠	ECA1VM562E	35V 5600U [M]
C703, 704⚠	ECA1VM332E	35V 3300U [M]
C705	RCE1CKA100BG	16V 10U [M]
C706	RCE1VKA100BG	35V 10U [M]
C707	ECBT1E103ZF	25V 0.01U [M]
C708	RCE1CKA100BG	16V 10U [M]
C709	ECBT1H104ZF5	50V 0.1U [M]
C710	ECBT1E103ZF	25V 0.01U [M]
C711	RCE1EM471BV	25V 470U [M]
C714	ECBT1H102KB5	50V 1000P [M]
C715⚠	ECA1EM472E	25V 4700U [M]
C717	ECEA1CKA330B	16V 33U [M]
C718	RCE1AKA101BG	10V 100U [M]
C719, 720	ECBT1E103ZF	25V 0.01U [M]
C721	RCE1AKA101BG	10V 100U [M]
C723	ECBT1E103ZF	25V 0.01U [M]
C725	RCE1CKA100BG	16V 10U [M]
C726	ECBT1E103ZF	25V 0.01U [M]
C731	ECBT1H102KB5	50V 1000P [M]
C732	ECBT1E223ZF	25V 0.022U [M]
C734	RCE1CKA100BG	16V 10U [M]
C736⚠	ECA1EM101B	25V 100U [M]
C737, 738⚠	ECA1HM101B	50V 100U [M]
C739⚠	ECA1JM101B	63V 100U [M]
C740	RCE1CKA100BG	16V 10U [M]
C741	ECBT1H104ZF5	50V 0.1U [M]
C801	ECQV1H154JM3	50V 0.15U [M]

Ref. No.	Part No.	Values & Remarks
C802	RCE1HKA3R3BG	50V 3.3U [M]
C803	ECQV1H154JM3	50V 0.15U [M]
C804	RCE1HKA4R7BG	50V 4.7U [M]
C805	RCE1HKAR47BG	50V 0.47U [M]
C806	RCE1HKA4R7BG	50V 4.7U [M]
C807	RCE1HKAR47BG	50V 0.47U [M]
C808	RCE1CKA100BG	16V 10U [M]
C809	ECEA1HKA010B	50V 1U [M]
C811, 812	ECEA1CKA330B	16V 33U [M]
C813	ECA1CM221B	16V 220U [M]
C814-817	RCE1CKA100BG	16V 10U [M]
C818	ECEA1HKA2R2B	50V 2.2U [M]
C820	ECEA1HKAR33B	50V 0.33U [M]
C821	ECA1CM221B	16V 220U [M]
C824	ECA1CM221B	16V 220U [M]
C825, 826	ECBT1H101KB5	50V 100P [M]
C827	ECBT1H330J5	50V 33P [M]
C828	ECFR1C823MR	16V 0.082U [M]
C829	ECFR1E332KR	25V 3300P [M]
C830	ECFR1C823MR	16V 0.082U [M]
C831	RCE1HKAR47BG	50V 0.47U [M]
C832	ECQV1H473JM3	50V 0.047U [M]
C833	ECA1CM221B	16V 220U [M]
C834	RCE1HKAR47BG	50V 0.47U [M]
C835	RCE1CKA470BG	16V 47U [M]
C836	ECEA1HKA010B	50V 1U [M]
C837	ECBT1H104ZF5	50V 0.1U [M]
C840, 841	RCE1CKA100BG	16V 10U [M]
C842	RCE1HKAR47BG	50V 0.47U [M]
C843	RCE1HKA4R7BG	50V 4.7U [M]
C844	RCE1HKAR47BG	50V 0.47U [M]
C845	RCE1HKA4R7BG	50V 4.7U [M]
C846	ECQV1H154JM3	50V 0.15U [M]
C847	RCE1HKA3R3BG	50V 3.3U [M]
C848	ECQV1H154JM3	50V 0.15U [M]
C851	RCE1CKA470BG	16V 47U [M]
C852	ECBA1H681KB5	50V 680P [M]
C861, 862	RCE1CKA100BG	16V 10U [M]
C863, 864	ECEA1CKA220B	16V 22U [M]
C865, 866	RCE1HKA3R3BG	50V 3.3U [M]
C867-869	ECEA1CKA330B	16V 33U [M]
C870	RCE1CKA100BG	16V 10U [M]
C871, 872	ECBT1H470J5	50V 47P [M]
C873, 874	ECEA0JKA470B	6.3V 47U [M]
C875, 876	RCE1CKA100BG	16V 10U [M]
C877	ECEA0JKA101B	6.3V 100U [M]
C878	ECBT1E103ZF	25V 0.01U [M]
C880	ECEA1CKA101B	16V 100U [M]
C882	ECEA1CKA101B	16V 100U [M]
C887	ECBT1H102KB5	50V 1000P [M]
C888, 889	ECBT1H221KB5	50V 220P [M]
C901	ECBT1H104ZF5	50V 0.1U [M]

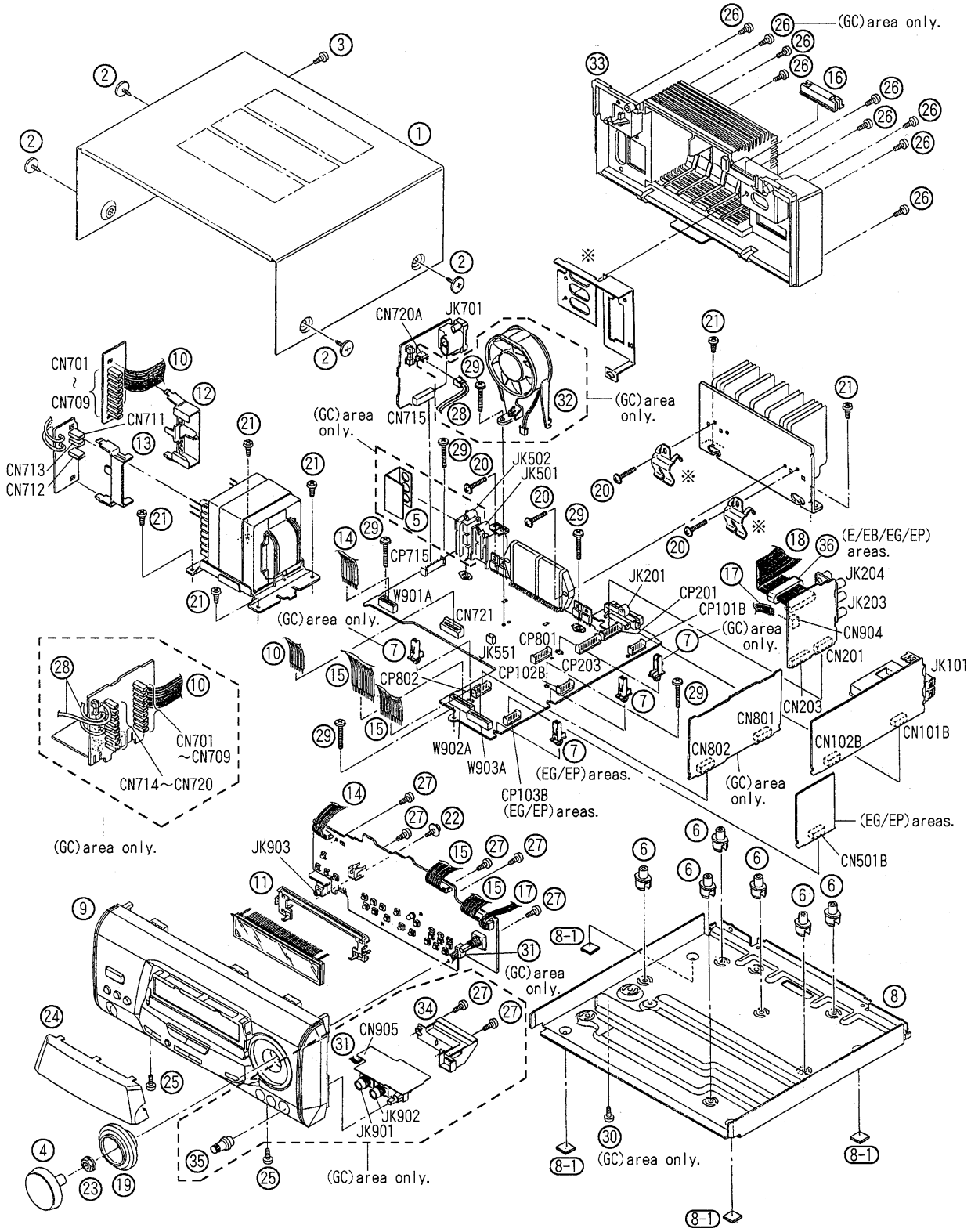
Ref. No.	Part No.	Values & Remarks
C902	ECA0JM102B	6.3V 1000U [M]
C903	ECBT1E103ZF	25V 0.01U [M]
C905-908	ECBT1H471KB5	50V 470P [M]
C909	ECBT1H102KB5	50V 1000P [M]
C910	ECBT1H150JC5	50V 15P [M]
C911	ECBT1H180JC5	50V 18P [M]
C912	ECBT1H104ZF5	50V 0.1U [M]
C913	RCE1CKA100BG	16V 10U [M]
C914	ECEA1HKA2R2B	50V 2.2U [M]
C915	ECBT1E103ZF	25V 0.01U [M]
C916	ECA0JKF101B	6.3V 100U [M]
C917	ECBT1E103ZF	25V 0.01U [M]
C918	ECEA0JKA221B	6.3V 220U [M]
C919, 920	ECEA1HKS2R2B	50V 2.2U [M]
C921	ECBT1H102KB5	50V 1000P [M]
C922	ECEA1VKA330B	35V 33U [M]
C1101, 1102	ECBT1H473ZF5	50V 0.047U [M]
C1103-1106	ECBT1H102KB5	50V 1000P [M]
C1107, 1108	ECBT1H473ZF5	50V 0.047U [M]
C1109-1111	ECBT1H102KB5	50V 1000P [M]

■ Replacement Parts List (Cabinet, Packing and Accessory)

Ref. No.	Part No.	Part Name & Description	Remarks
		CABINET PARTS	
1	RKM0202E-K	CABINET	[M] (E/EB/EG/EP)
1	RKM0202F-K	CABINET	[M] (GC)
2	RHD30007-K1	SCREW	[M]
3	XTBS3+10JFZ1	SCREW	[M]
4	RGW0183-K	KNOB, VOLUME	[M]
5	RMV0136	HOLDER	[M] (GC)
6	RKQ0089-2	P. C. B. SPACER	[M]
7	RMN0203	P. C. B. HOLDER 1	[M]
8	RFKJAEH50E-K	CHASSIS ASS'Y	[M] (E/EB/EG/EP)
8	RFKJAEH50GCK	CHASSIS ASS'Y	[M] (GC)
8-1	SHG1645	RUBBER	[M]
9	RFKGAEH50E-K	FRONT PANEL ASS'Y	[M] (E/EB)
9	RFKGAEH50EGK	FRONT PANEL ASS'Y	[M] (EG/EP)
9	RFKGAEH50GCK	FRONT PANEL ASS'Y	[M] (GC)
10	RWJ1809150KQ	FLAT CABLE (W721/9P)	[M]
11	RMN0426	FL HOLDER	[M]
12	RMN0429	P. C. B. HOLDER 2	[M]
13	RMN0437	P. C. B. HOLDER 3	[M]
14	RWJ7610260QQ	FLAT CABLE (W901/10P)	[M]
15	RWJ7615210QQ	FLAT CABLE (W902·W903/15P)	[M]
16	RMN0427	CABLE HOLDER	[M]
17	RWJ6805330QR	FLAT CABLE (W904/5P)	[M]
18	REX0852	WIRE ASS'Y (W202)	[M]
19	RGK0894-N	ORNAMENT	[M]
20	XTW3+15T	SCREW	[M]
21	XTB3+8JFZ	SCREW	[M]
22	RHD26016	SCREW	[M]
23	RHN90001	NUT	[M]
24	RKW0506B-Q	FL PANEL	[M]
25	XTBS3+8JFZ1	SCREW	[M]
26	XTB3+10JFZ	SCREW	[M]
27	XTBS26+8J	SCREW	[M]
28	RFKEAEH60GCK	WIRE ASS'Y	[M] (GC)
29	XTB3+20JFZ	SCREW	[M]
30	XTB3+8FFZ	SCREW	[M] (GC)
31	REZ0971	FLAT CABLE (W905/5P)	[M] (GC)
32	REM0057	FAN UNIT	[M] (GC)
33	RKF0513B-K	REAR PANEL	[M] (E/EG/EP)
33	RFKHAEH50EBK	REAR PANEL ASS'Y	[M] (EB)
33	RFKHAEH50GCK	REAR PANEL ASS'Y	[M] (GC)
34	RMN0425	JACK HOLDER	[M] (GC)
35	RGW0235-K	KNOB, MIC VOLUME	[M] (GC)
36	RLBT4001-D	FERRITE CORE (5P)	[M] (E/EB/EG EP)
		PACKING MATERIALS	
P1	RPN1036-1	PAD (SA-EH50)	[M]
P1	RPN1038	PAD (SH/SL-EH50)	[M]
P1	RPN1037	PAD (RS-EH60)	[M]
P2	RPQ0779	PAD (SA-EH50)	[M] (E/EB/EG)
P3	RPQ0734	PAD (SA-EH50)	[M] (E/EB/EG)
P4	RPQ0777-1	PAD (SH/SL-EH50)	[M] (E)
P5	RPQ0734	PAD (RS-EH60)	[M] (E)
P6	RPQ0776-1	PAD (RS-EH60)	[M] (E)
P7	RPQ0769	PAD (SYSTEM)	[M] (EP/GC)
P8	RPQ0770	PAD (SYSTEM)	[M] (EP/GC)
P9	RPF0139	PROTECTION COVER	[M]
P10	RPG3521	PACKING CASE (SA-EH50)	[M] (E/EB/EG)
P10	RPG3517	PACKING CASE (SA-EH50)	[M] (EP/GC)
P10	RPG3451	PACKING CASE (SH-EH50)	[M] (E)
P10	RPG3513	PACKING CASE (SH-EH50)	[M] (EP)
P10	RPG3514	PACKING CASE (SH-EH50)	[M] (GC)
P10	RPG3348	PACKING CASE (SL-EH50)	[M] (E)
P10	RPG3514	PACKING CASE (SL-EH50)	[M] (EP)
P10	RPG3453	PACKING CASE (RS-EH60)	[M] (E)
P10	RPG3515	PACKING CASE (RS-EH60)	[M] (EP)
P11	RPG3449	PACKING CASE (SYSTEM)	[M] (EP)
P11	RPG3340	PACKING CASE (SYSTEM)	[M] (GC)
P12	SPP740	SHEET	[M]
		ACCESSORIES	
A1	RAK-CH426WH	REMOTE CONTROL TRANSMITTER	[M] (E/EB/EG/EP)
A1	RAK-CH220WH	REMOTE CONTROL TRANSMITTER	[M] (GC)
A1-1	RKK0080-K	BATTERY COVER	[M] (E/EB/EG/EP)
A1-1	RKK0057-K	BATTERY COVER	[M] (GC)
A2	REE0499	SPEAKER CORD	[M]
A3⚠	RJA0019-X	AC POWER SUPPLY CORD	[M] (E/EG/EP/GC)
A3⚠	RJA0053-1X	AC POWER SUPPLY CORD	[M] (EB)
A4	RQA0117	WARRANTY CARD	[M] (E/EB/EG)
A5<IA>	RQT3988-E	INSTRUCTION MANUAL	[M] (E)
A5<IB>	RQT3868-B	INSTRUCTION MANUAL	[M] (EB/EP)
A5<IC>	RQT3870-D	INSTRUCTION MANUAL	[M] (EG)
A5<ID>	RQT3871-H	INSTRUCTION MANUAL	[M] (EG)
A5<IE>	RQT3869-R	INSTRUCTION MANUAL	[M] (EP)
A5<IF>	RQT3873-G	INSTRUCTION MANUAL	[M] (GC)
A6	RSA0007	FM INDOOR ANTENNA	[M] (E/EB/EG/EP)
A6	RSA0006	FM INDOOR ANTENNA	[M] (GC)
A7	RSA0012	AM LOOP ANTENNA	[M]
A7-1	RMN0244	ANTENNA HOLDER	[M]
A8	RQCB0169	SERVICENTER LIST	[M] (E/EB/EG/GC)
A9	RQCA0536	QUICK SET UP GUIDE	[M] (EB)
A10	SJP9009	ANTENNA PLUG ADAPTER	[M] (EB)
A11⚠	SJP5213-1	AC PLUG ADAPTER	[M] (GC)
		JIG/TOOL (S)	
SA1	RFKX0002	GREASE	[M]

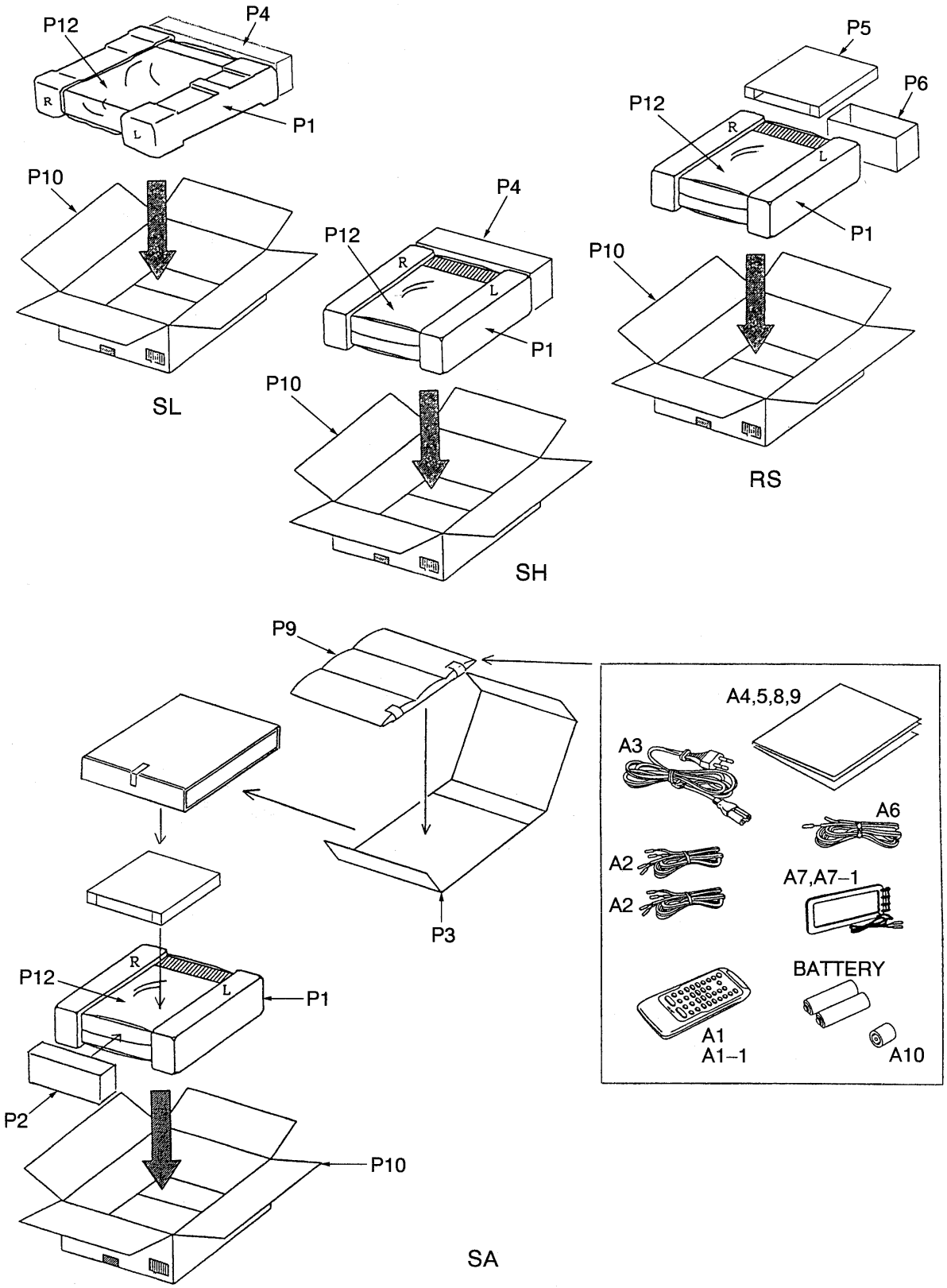
NOTE: The "<IA>, <IB>, <IC>, <ID>, <IE>, <IF>" marks in Remarks indicate language of instruction manual.
<IA>: Spanish, Swedish, French
<IB>: English
<IC>: German, Italian, French
<ID>: Dutch, Danish
<IE>: Russin, Polish, Czeco
<IF>: English, China, Arabic

■ Cabinet Parts Location

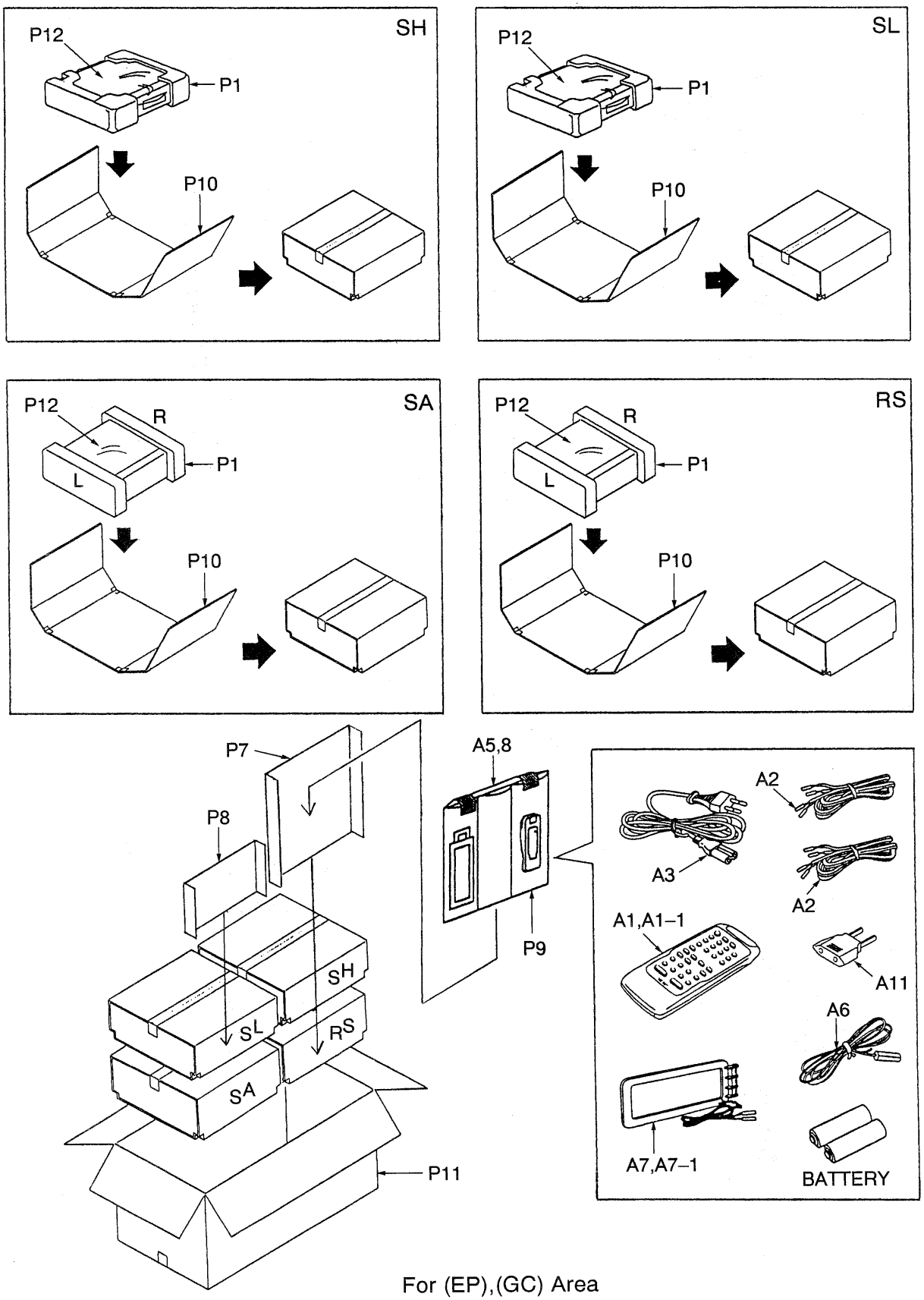


We do not supply those items of parts marked ※.

■ Packaging



For (E),(EB),(EG) Area



For (EP),(GC) Area

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